

HISTORY INFORMATION FOR THE FOLLOWING MANUAL:

# SERVICE MANUAL

# BA-5D CHASSIS

<u>MODEL NAME</u>	<u>REMOTE COMMANDER</u>	<u>DESTINATION</u>	<u>CHASSIS NO.</u>
<b>KV-27FV300</b>	RM-Y181	US	SCC-S65AA
<b>KV-27FV300</b>	RM-Y181	CND	SCC-S64AA
<b>KV-29FV300</b>	RM-Y181	LATIN NORTH	SCC-S62BA
<b>KV-29FV300</b>	RM-Y181	LATIN SOUTH	SCC-S62CA
<b>KV-32FV300</b>	RM-Y182	US	SCC-S65BA
<b>KV-32FV300</b>	RM-Y182	CND	SCC-S64BA
<b>KV-36FV300</b>	RM-Y182	US	SCC-S65CA
<b>KV-36FV300</b>	RM-Y182	CND	SCC-S64CA
<b>KV-36FV300</b>	RM-Y182	HAWAII	SCC-S67AA

**ORIGINAL MANUAL ISSUE DATE: 3/2002**

( :UPDATED ITEM

REVISION DATE	REVISION TYPE	SUBJECT
3/2002		No revisions or updates are applicable at this time.
5/2002	Correction - 1	Critical parts incorrectly indentified in Exploded View, Electrical Parts List, A Board Schematic. (Replace pgs. 31, 55,57,59, & 70)
10/2002	Correction - 2	Exploded View PN correction for Door (Replace pgs. 56, 58, & 60)
12/2004		Updated A Board Schematic to include CN903 and CN905 Connectors for headphones. (Replace pg. 31)

**TRINITRON® COLOR TELEVISION**  
**SONY®**

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<b>KV-36FV300</b>	RM-Y182	HAWAII	SCC-S67AA



KV-36FV300



RM-Y182

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## SPECIFICATIONS

	KV-27FV300 KV-29FV300	KV-32FV300	KV-36FV300
<b>Power Requirements</b>	120V, 60Hz		
<b>Number of Inputs/Outputs</b>			
<b>Video</b> <sup>1)</sup>		3	
<b>S Video</b> <sup>2)</sup>		2	
<b>Y, P<sub>B</sub>, P<sub>R</sub></b> <sup>3)</sup>		1	
<b>Audio</b> <sup>4)</sup>		3	
<b>Audio Out</b> <sup>5)</sup>		1	
<b>Monitor Out</b>		1	
<b>Speaker Output (W)</b>	7.5 W x 2, 15 Wsubwoofer		
<b>Power Consumption (W)</b>			
<b>In Use (Max)</b>	220 W	230 W	230 W
<b>In Standby</b>	1W	1W	1W
<b>Dimensions (W x H x D)</b>			
<b>mm</b>	784 x 601.5 x 520 mm	898 x 682 x 584 mm	1020 x 760 x 640 mm
<b>in</b>	30 <sup>7/8</sup> x 23 <sup>11/16</sup> x 20 <sup>1/2</sup> in	35 <sup>3/8</sup> x 26 <sup>7/8</sup> x 23 in	40 <sup>1/4</sup> x 30 x 25 <sup>1/4</sup> in
<b>Mass</b>			
<b>kg</b>	48 kg	78 kg	102 kg
<b>lbs</b>	105 lbs. 13 oz.	171 lbs. 15 oz.	224 lbs. 14 oz.

**Television system**

American TV standard, NTSC

**Channel coverage**

VHF: 2-13/ UHF: 14-69/ CATV: 1-125

**Picture tube**

FD Trinitron® tube

**Visible screen size**

27 inch picture measured diagonally (KV-27FV300/29FV300)

32 inch picture measured diagonally (KV-32FV300)

36 inch picture measured diagonally (KV-36FV300)

**Actual screen size**

29 inch measured diagonally (KV-27FV300/29FV300)

34 inch measured diagonally (KV-32FV300)

38 inch measured diagonally (KV-36FV300)

**Antenna**

75-ohm external antenna terminal for VHF/UHF

**Supplied Accessories**

Size AA (R6) batteries (2)

Remote Control RM-Y181 (1) (KV-27FV300/29FV300)

Remote Control RM-Y182 (1) (KV-32FV300/36FV300)

Wireless Headphones (1) (KV-32FV300/36FV300)

**Optional Accessories**

TV Stand: SU-27HV2 for (KV-27KV300/29FV300)

SU-32HV3 for (KV-32KV300)

SU-36HV3 for (KV-36KV300)

*Design and specifications are subject to change without notice.*

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by SRS

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## WARNINGS AND CAUTIONS

### CAUTION

Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield, or carbon painted on the CRT, after removing the anode.

### WARNING!!

An isolation transformer should be used during any service to avoid possible shock hazard, because of live chassis. The chassis of this receiver is directly connected to the ac power line.



### **SAFETY-RELATED COMPONENT WARNING!!**

Components identified by shading and  mark on the schematic diagrams, exploded views, and in the parts list are critical for safe operation. Replace these components with Sony parts whose part numbers appear as shown in this manual or in supplements published by Sony. Circuit adjustments that are critical for safe operation are identified in this manual. Follow these procedures whenever critical components are replaced or improper operation is suspected.

---

### ATTENTION!!

Apres avoir deconnecte le cap de l'anode, court-circuiter l'anode du tube cathodique et celui de l'anode du cap au chassis metallique de l'appareil, ou la couche de carbone peinte sur le tube cathodique ou au blindage du tube cathodique.

Afin d'eviter tout risque d'electrocution provenant d'un châssis sous tension, un transformateur d'isolement doit etre utilise lors de tout dépannage. Le châssis de ce récepteur est directement raccordé à l'alimentation du secteur.



### **ATTENTION AUX COMPOSANTS RELATIFS A LA SECURITE!!**

Les composants identifies par une trame et par une marque  sur les schemas de principe, les vues exploseees et les listes de pieces sont d'une importance critique pour la securite du fonctionnement. Ne les remplacer que par des composants Sony dont le numero de piece est indique dans le present manuel ou dans des supplements publies par Sony. Les reglages de circuit dont l'importance est critique pour la securite du fonctionnement sont identifies dans le present manuel. Suivre ces procedures lors de chaque remplacement de composants critiques, ou lorsqu'un mauvais fonctionnement suspecte.

## SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or touching high-wattage resistors.
3. Check that all control knobs, shields, covers, ground straps, and mounting hardware have been replaced. Be absolutely certain that you have replaced all the insulators.
4. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
5. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
6. Check the line cords for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
7. Check the B+ and HV to see if they are specified values. Make sure your instruments are accurate; be suspicious of your HV meter if sets always have low HV.
8. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

### Leakage Test

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instructions.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low voltage scale. The Simpson's 250 and Sanwa SH-63TRD are examples of passive VOMs that are suitable. Nearly all battery-operated digital multimeters that have a 2 VAC range are suitable (see Figure A).

### How to Find a Good Earth Ground

A cold-water pipe is a guaranteed earth ground; the cover-plate retaining screw on most AC outlet boxes is also at earth ground. If the retaining screw is to be used as your earth ground, verify that it is at ground by measuring the resistance between it and a cold-water pipe with an ohmmeter. The reading should be zero ohms.

If a cold-water pipe is not accessible, connect a 60- to 100-watt trouble-light (not a neon lamp) between the hot side of the receptacle and the retaining screw. Try both slots, if necessary, to locate the hot side on the line; the lamp should light at normal brilliance if the screw is at ground potential (see Figure B).

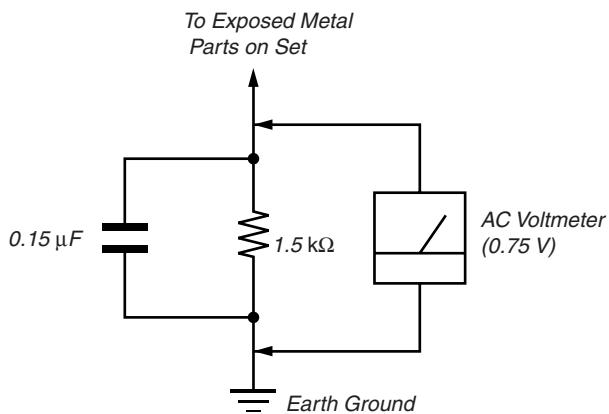


Figure A. Using an AC voltmeter to check AC leakage.

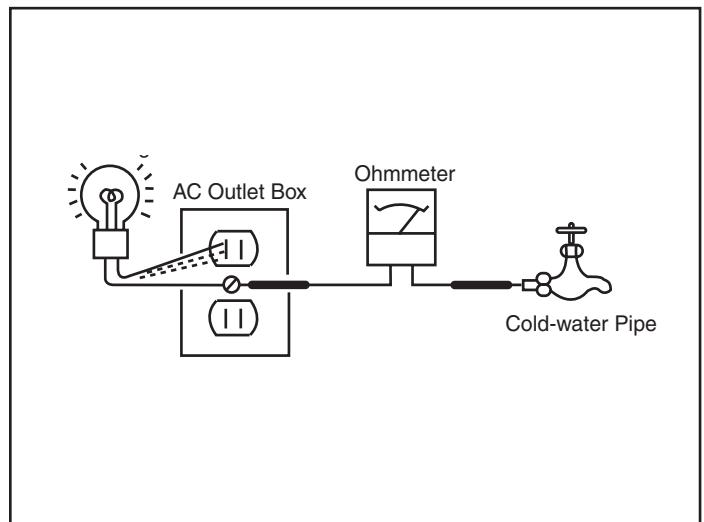


Figure B. Checking for earth ground.

## SELF-DIAGNOSTIC FUNCTION

**Self Diagnosis**  
Supported model

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER LED will automatically begin to flash. The number of times the LED flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER LED flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the Remote Commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

### Diagnostic Test Indicators

When an error occurs, the STANDBY/TIMER LED will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the LED will identify the first of the problem areas.

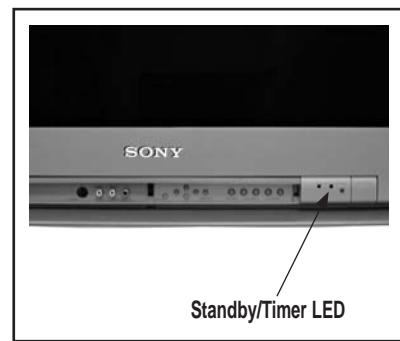
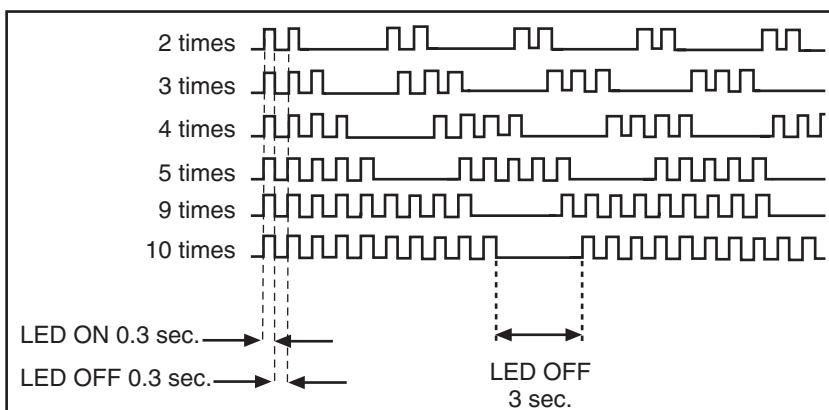
Results for all of the following diagnostic items are displayed on screen. If the screen displays a "0", an error has occurred.

Diagnostic Item	No. of times STANDBY / TIMER lamp flashes	Probable Cause Location	Detected Symptoms
Power does not turn on	Does not light	<ul style="list-style-type: none"> <li>Power cord is not plugged in.</li> <li>Fuse is burned out (F601). (GK Board)</li> </ul>	<ul style="list-style-type: none"> <li>Power does not come on.</li> <li>No power is supplied to the TV.</li> <li>AC Power supply is faulty.</li> </ul>
+B overcurrent (OCP)*	2 times	<ul style="list-style-type: none"> <li>H.OUT (Q502) is shorted. (A Board)</li> <li>IC702 is shorted. (C Board)</li> </ul>	<ul style="list-style-type: none"> <li>Power does not come on.</li> <li>Load on power line shorted.</li> </ul>
+B overvoltage (OVP)	3 times	<ul style="list-style-type: none"> <li>IC501 is faulty. (A Board)</li> <li>If a high is supplied to pin 2 of IC501. (A Board)</li> </ul>	<ul style="list-style-type: none"> <li>Has entered standby mode.</li> </ul>
I-Prot	4 times	<ul style="list-style-type: none"> <li>+12V is not supplied. (A Board)</li> <li>IC561 is faulty. (A Board)</li> </ul>	<ul style="list-style-type: none"> <li>Has entered standby state after horizontal raster.</li> <li>Vertical deflection pulse is stopped.</li> <li>Power line is shorted or power supply is stopped.</li> </ul>
IK (AKB)	5 times	<ul style="list-style-type: none"> <li>Video OUT (IC561) is faulty. (A Board)</li> <li>IC702 is faulty. (C Board)</li> <li>Screen (G2) is improperly adjusted. **</li> </ul>	<ul style="list-style-type: none"> <li>No raster is generated.</li> <li>CRT Cathode current detection reference pulse output is small.</li> </ul>
Zero Cross	9 times	<ul style="list-style-type: none"> <li>No zero cross pulses on pin 45 IC1001. (A Board)</li> </ul>	<ul style="list-style-type: none"> <li>Power does not come on.</li> </ul>
9V Check	10 times	<ul style="list-style-type: none"> <li>Relay failed (RY600)</li> </ul>	<ul style="list-style-type: none"> <li>Power does not come on.</li> </ul>

\* If a +B overcurrent is detected, stoppage of the vertical deflection is detected simultaneously. The symptom that is diagnosed first by the microcontroller is displayed on the screen.

\*\* Refer to Screen (G2) Adjustments in Section 2-4 of this manual

### Display of Standby/Timer LED Flash Count



Diagnostic Item	Flash Count*
+B Overcurrent	2 times
+B Overvoltage	3 times
V-STOP	4 times
IK (AKB)	5 times
Zero Cross	9 times
9V	10 times

\*One flash count is not used for self-diagnostic.

### Stopping the Standby/Timer LED Flash

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER LAMP from flashing.

### Self-Diagnostic Screen Display

For errors with symptoms such as "power sometimes shuts off" or "screen sometimes goes out" that cannot be confirmed, it is possible to bring up past occurrences of failure on the screen for confirmation.

#### To Bring Up Screen Test

In standby mode, press buttons on the Remote Commander sequentially, in rapid succession, as shown below:

[DISPLAY] → Channel [5] → Sound volume [-] → Power ON.

SELF DIAGNOSIS	
2: +B OCP	0
3: +B OVP	0
4: VSTOP	0
5: AKB	1
9: ZCD	0
10: 9VON	0
101: WDT	0
Serial: xxxxxx	
Model: xxxxxx	

Numeral "0" means that no fault was detected.  
Numeral "1" means a fault was detected one time only.

### Handling of Self-Diagnostic Screen Display

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to "0".

Unless the result display is cleared to "0", the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

### Clearing the Result Display

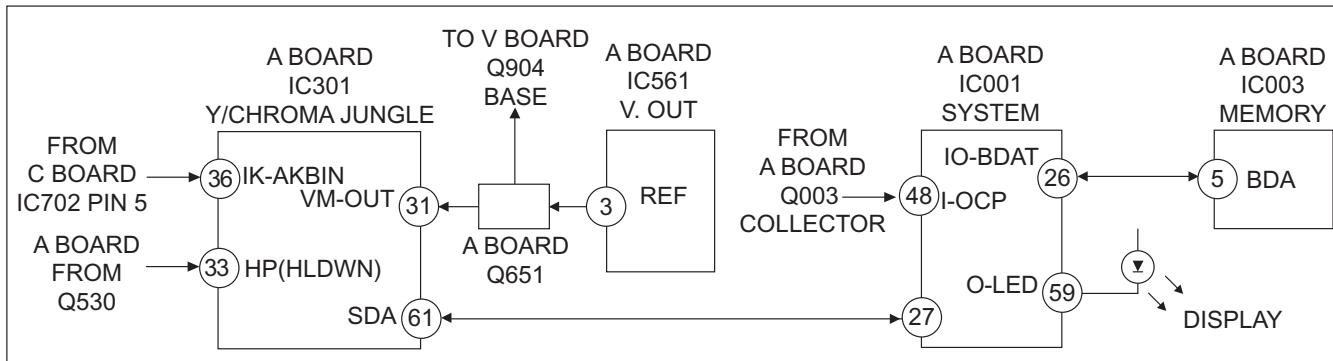
To clear the result display to "0", press buttons on the Remote Commander sequentially when the diagnostic screen is displayed, as shown below:

Channel [8] → [ENTER]

### Quitting the Self-Diagnostic Screen

To quit the entire self-diagnostic screen, turn off the power switch on the Remote Commander or the main unit.

### Self-Diagnostic Circuit



**+B overcurrent (OCP)**

Occurs when an overcurrent on the +B (135V) line is detected by pin 48 of IC001 (A Board). If the voltage of pin 48 of IC001 (A Board) is less than 1V when V.SYNC is more than seven verticals in a period, the unit will automatically turn off.

**+B overvoltage (OVP)**

Occurs when a high is felt on pin 2 of IC501 (A Board).

**I-PROT**

Occurs when an absence of the vertical deflection pulse is detected by pin 31 of IC301 (A Board). Power supply will shut down when waveform interval exceeds 2 seconds.

**IK (AKB)**

If the RGB levels\* do not balance within 2 seconds after the power is turned on, this error will be detected by IC301 (A Board). TV will stay on, but there will be no picture.

\*(Refers to the RGB levels of the AKB detection Ref pulse that detects 1K).

**Zero Cross**

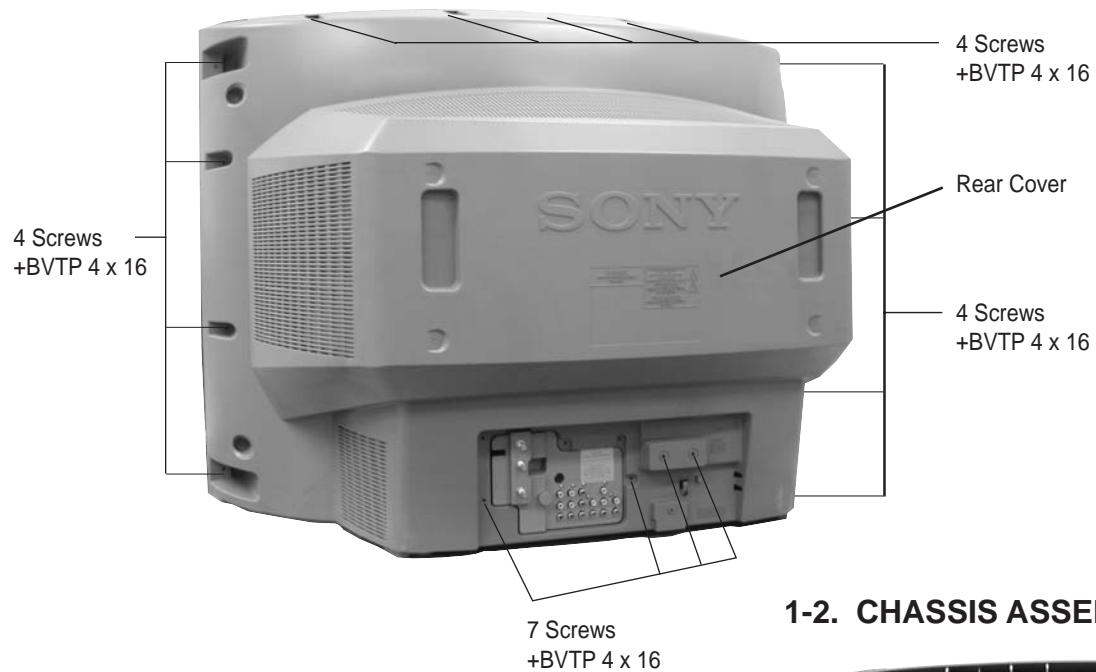
Check Q691 collector (GK Board) 7.5V STBY goes to 0V when the set is turned on.

**9V Check**

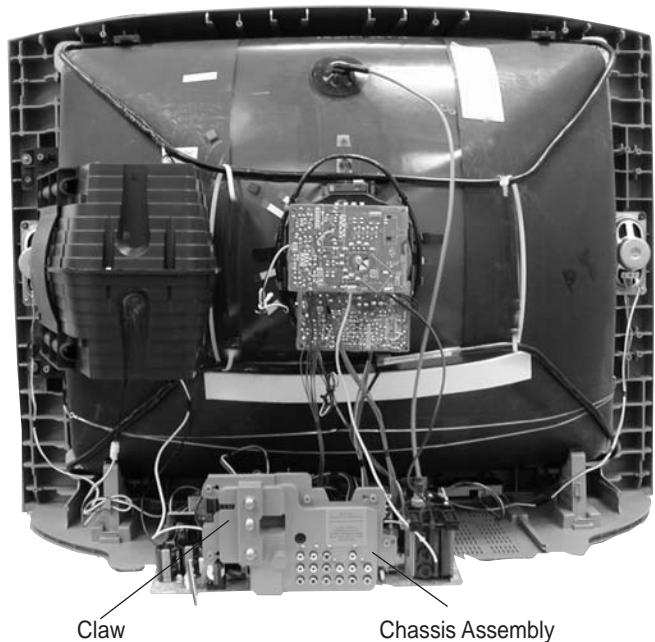
Check Q691 collector (GK Board) 7.5V STBY goes to 0V when the set is turned on.

## SECTION 1: DISASSEMBLY

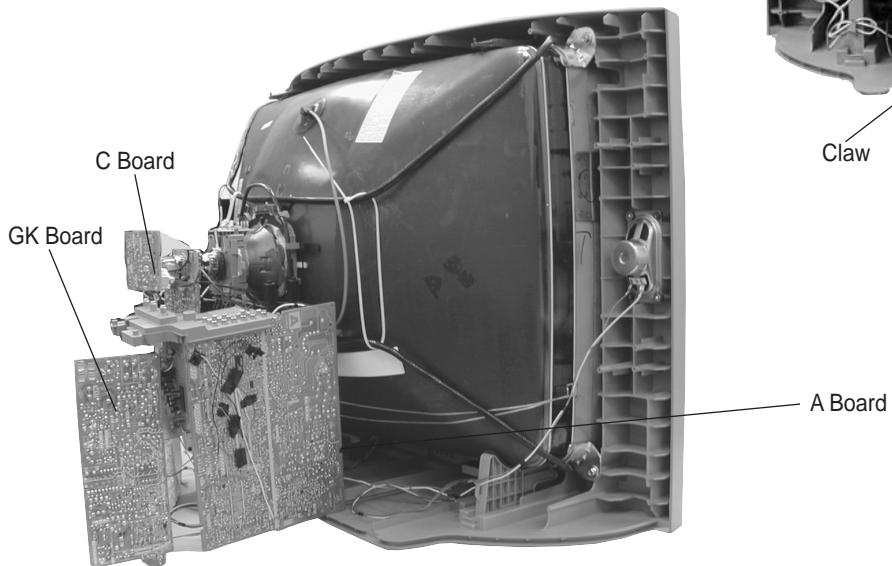
### 1-1. REAR COVER REMOVAL



### 1-2. CHASSIS ASSEMBLY REMOVAL



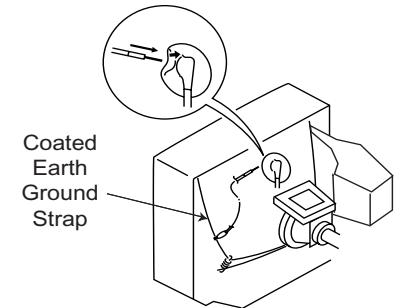
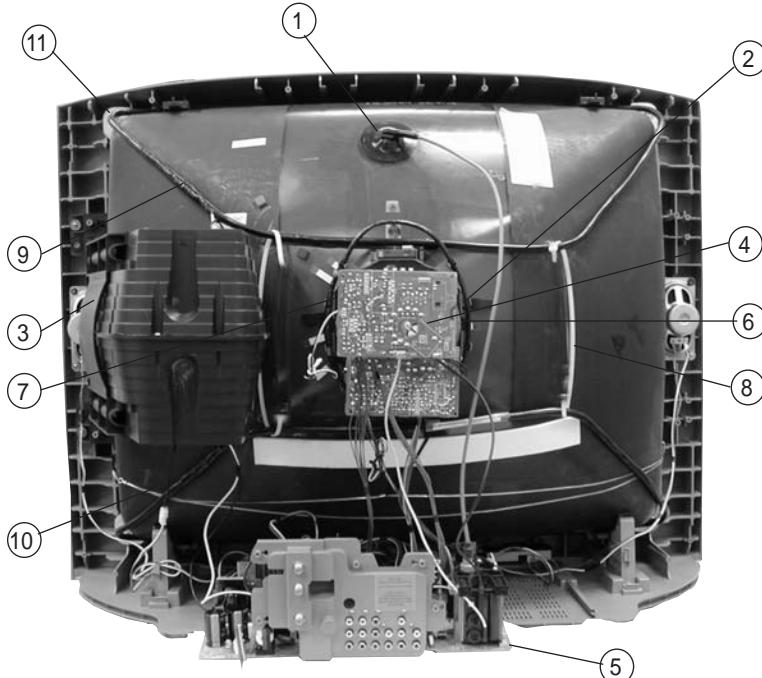
### 1-3. SERVICE POSITION



## 1-4. PICTURE TUBE REMOVAL

### WARNING: BEFORE REMOVING THE ANODE CAP

High voltage remains in the CRT even after the power is disconnected. To avoid electric shock, discharge CRT before attempting to remove the anode cap. Short between anode and CRT coated earth ground strap.



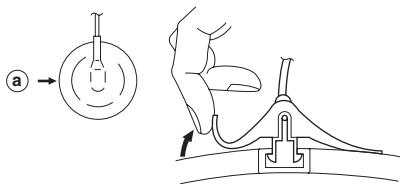
1. Discharge the anode of the CRT and remove the anode cap.
2. Unplug all interconnecting leads from the deflection yoke, neck assembly, degaussing coils and CRT grounding strap.
3. Remove the Sub-Woofer Assemblies.
4. Remove the C Board from the CRT.
5. Remove the chassis assembly.
6. Loosen the neck assembly fixing screw and remove.
7. Loosen the deflection yoke fixing screw and remove.
8. Place the set with the CRT face down on a cushion and remove the degaussing coil holders.
9. Remove the degaussing coils.
10. Remove the CRT grounding strap and spring tension devices.
11. Unscrew the four CRT fixing screws [located on each CRT corner] and remove the CRT [Take care not to handle the CRT by the neck].

## ANODE CAP REMOVAL PROCEDURE

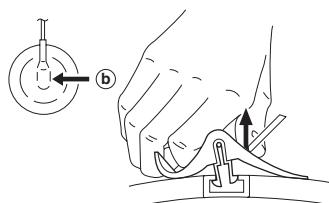
**WARNING:** High voltage remains in the CRT even after the power is disconnected. To avoid electric shock, discharge CRT before attempting to remove the anode cap. After removing the anode cap, short circuit to either the metal chassis, CRT shield, or carbon painted on the CRT.

**NOTE:** After removing the anode cap, short circuit the anode of the picture tube and the anode cap to either the metal chassis, CRT shield or carbon painted on the CRT.

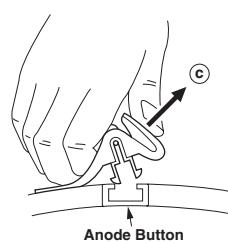
## REMOVAL PROCEDURES



Turn up one side of the rubber cap in the direction indicated by arrow a .



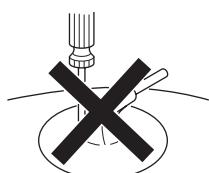
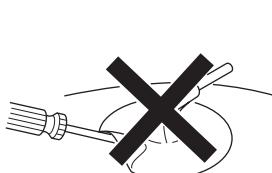
Use your thumb to pull the rubber cap firmly in the direction indicated by arrow b .



When one side of the rubber cap separates from the anode button, the anode cap can be removed by turning the rubber cap and pulling it in the direction of arrow c .

## HOW TO HANDLE AN ANODE CAP

1. Do not use sharp objects which may cause damage to the surface of the anode cap.
2. To avoid damaging the anode cap, do not squeeze the rubber covering too hard. A material fitting called a shatter-hook terminal is built into the rubber.
3. Do not force turn the foot of the rubber cover. This may cause the shatter-hook terminal to protrude and damage the rubber.



## SECTION 2: SET-UP ADJUSTMENTS

The following adjustments should be made when a complete realignment is required or a new picture tube is installed. These adjustments should be performed with rated power supply voltage unless otherwise noted.

The controls and switch should be set as follows unless otherwise noted:

PICTURE CONTROL: normal  
BRIGHTNESS CONTROL: normal

**Perform the adjustments in order as follows:**

1. Beam Landing
2. Convergence
3. Focus
4. Screen (G2)/White Balance

**Test Equipment Required:**

1. Color Bar Pattern Generator
2. Degausser
3. DC Power Supply
4. Digital Multimeter
5. Oscilloscope
6. CRT Analyzer

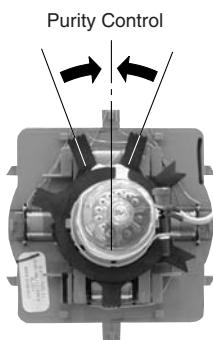
### 2-1. BEAM LANDING

#### Preparation:

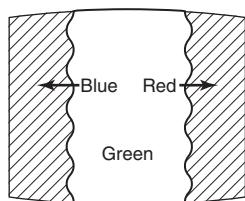
- Input a white pattern signal.
- Face the picture tube in an East or West direction to reduce the influence of geomagnetism.

**NOTE: Do not use the hand degausser; it magnetizes the CRT .**

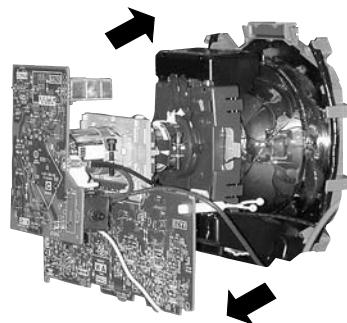
1. Input white pattern from pattern generator.
2. Loosen the deflection yoke mounting screw, and set the purity control to the center as shown below:



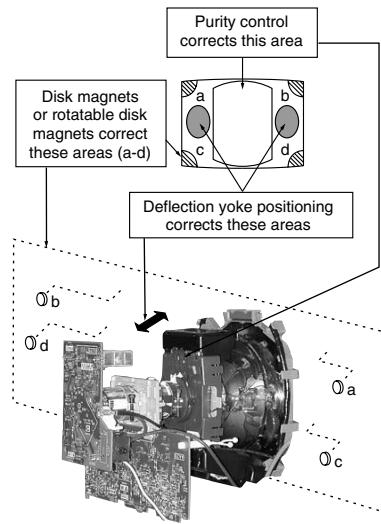
3. Input green pattern from pattern generator.
4. Move the deflection yoke backward, and adjust with the purity control so that green is in the center and red and blue are even on both sides.



5. Move the deflection yoke forward, and adjust so that the entire screen becomes green.



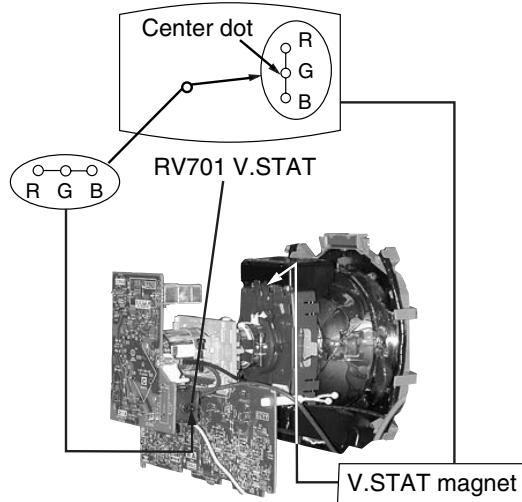
6. Switch over the raster signal to red and blue and confirm the condition.
7. When the position of the deflection yoke is determined, tighten it with the deflection yoke mounting screw.
8. When landing at the corner is not right, adjust by using the disk magnets.



## 2-2. CONVERGENCE

### Preparation:

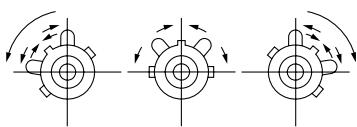
- Perform FOCUS, V. LIN and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Input dot pattern.



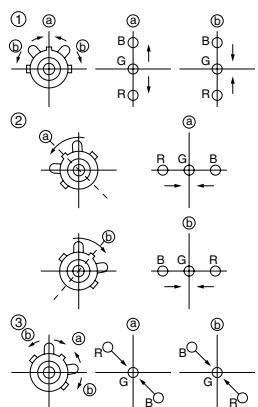
## VERTICAL AND HORIZONTAL STATIC CONVERGENCE

1. Adjust V. STAT magnet to converge red, green and blue dots in the center of the screen (Vertical movement).

Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.



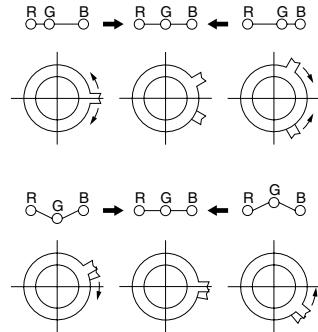
2. When the V. STAT magnet is moved in the direction of arrow a and b, red, green, and blue dots move as shown below:



## OPERATION OF BMC (HEXAPOLE) MAGNET

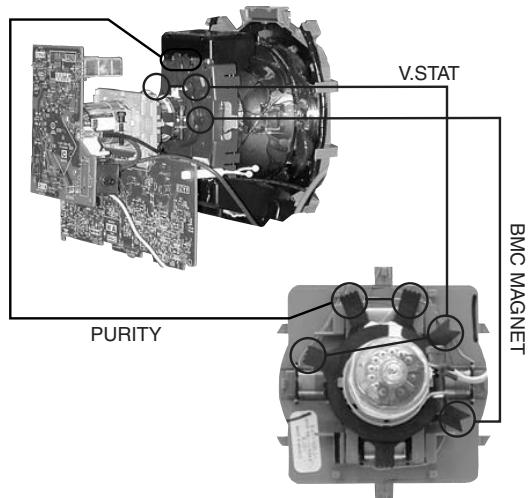
The respective dot positions resulting from moving each magnet interact, so perform adjustment while tracking.

1. Use the V. STAT tabs to adjust the red, green, and blue dots so they line up at the center of the screen (move the dots in a horizontal direction).



## Y SEPARATION AXIS CORRECTION MAGNET ADJUSTMENT

1. Input cross-hatch pattern, adjust PICTURE to minimum and BRIGHTNESS to normal.
2. Adjust the deflection yoke upright so it touches the CRT.
3. Adjust so that the Y separation axis correction magnet on the neck assembly is symmetrical from top to bottom (open state).

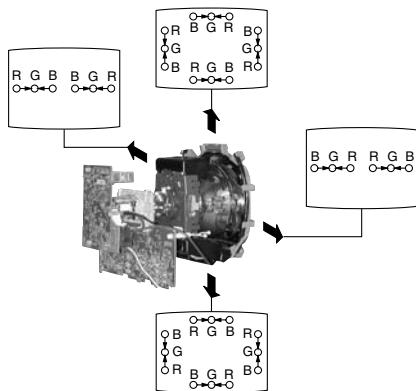


4. Return the deflection yoke to its original position.

## DYNAMIC CONVERGENCE ADJUSTMENT

Before starting, perform Vertical and Horizontal Static Convergence Adjustment.

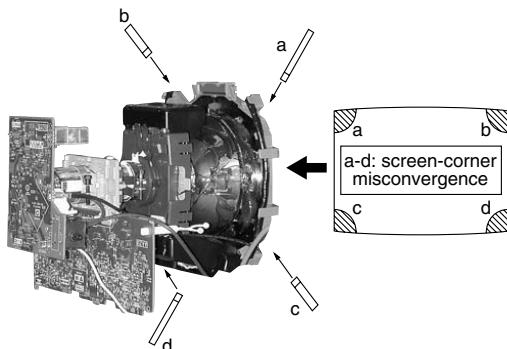
1. Slightly loosen deflection yoke screw.
2. Remove deflection yoke spacers.
3. Move the deflection yoke for best convergence as shown below:



4. Tighten the deflection yoke screw.
5. Install the deflection yoke spacers.

## SCREEN-CORNER CONVERGENCE

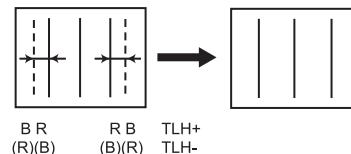
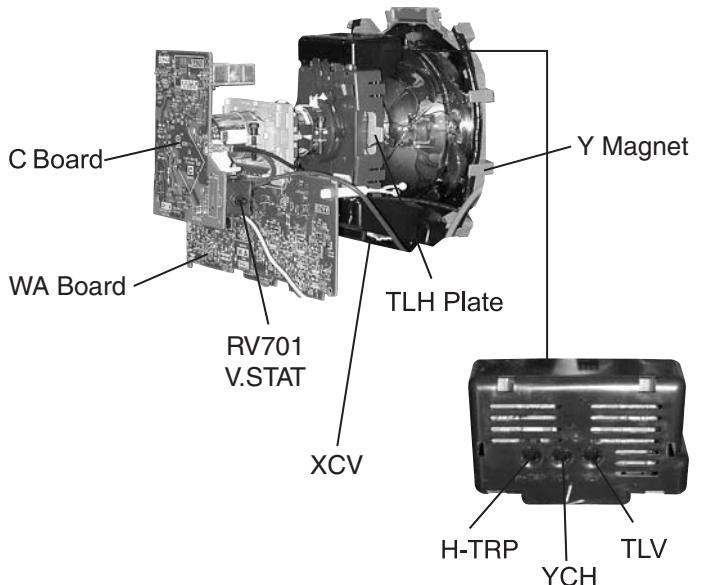
1. Affix a permalloy assembly corresponding to the misconverged areas:



## TLH PLATE ADJUSTMENT

### Preparation:

- Input crosshatch pattern.
- Adjust Picture Quality to standard, Picture and Brightness to 50%, and Other to standard.
- Adjust the Horizontal Convergence of red and blue dots by tilting the TLH plate on the deflection yoke.

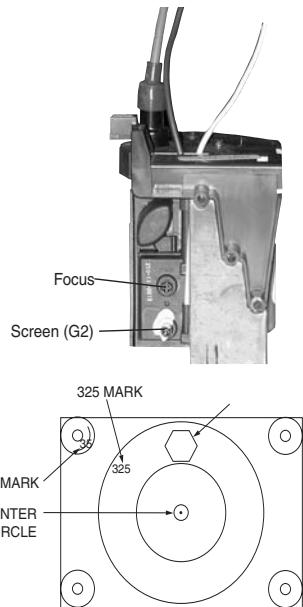


1. Adjust XCV core to balance X axis.
2. Adjust YCH VR to balance Y axis.
3. Adjust vertical red and blue convergence with V.TILT (TLV VR.). Perform adjustments while tracking items 1 and 2.
4. Adjust Y MAGNET to correct V.BOW Geometry Distortion.
5. Adjust H-TRP to correct H.Trapezoid Geometry Distortion.

After adjusting items 4 and 5, confirm overall geometry again.

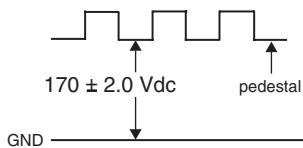
## 2-3. FOCUS

1. Input monoscope signal.
2. Set user controls to normal.
3. Set video mode to STANDARD.
4. Set the PICTURE to maximum.
5. Adjust at 325 Mark for best center/corner focus balance.
6. Receive an entire white signal. Make sure Magenta Ring is at an acceptable level.



## 2-4. SCREEN (G2)

1. Input dot pattern from the pattern generator.
2. Set the user controls to NORMAL.
3. Attach the G2-Jig to the C Board.
4. Adjust RCUT, GCUT, BCUT, and SBRT in service mode with an oscilloscope so that voltages on the red, green, and blue cathodes are  $170 \pm 2.0\text{Vdc}$ .
5. Observe the screen and adjust SCREEN (G2) VR to obtain the faintly visible background of dot signal.
6. Push the TEST + JUMP (+ Channel) to cut off the signal. The screen should be bright or dark. Brightness of raster must be increased when adjusting.
7. Adjust screen VR until the screen is slightly cut off, or scarcely lights up. A signal cannot be seen when the brightness of the raster is high.
8. Push the JUMP again to release the cut off.



## 2-5. WHITE BALANCE ADJUSTMENTS

Adj.	NO.	Disp.	Item	All Models
VID_ADJ	0	RDRV	Red Drive	41
VID_ADJ	1	GDRV	Green Drive	32
VID_ADJ	2	BDRV	Blue Drive	29
VID_ADJ	3	RCUT	Red Cut-off	31
VID_ADJ	4	GCUT	Green Cut-off	14
VID_ADJ	5	BCUT	Blue Cut-off	17
VP2	4	SBRT	Sub Bright	16

1. Set program palette to STANDARD and push RESET.
2. Input an entire white signal.
3. Set to Service Adjustment Mode.
4. Set the PICTURE and BRIGHT to minimum.
5. Adjust with SBRT if necessary.
6. Set RCUT to "14".
7. Select GCUT and BCUT with **3** and **5**.
8. Adjust by pressing **1** and **4** for the best white balance.
9. Set the PICTURE and BRIGHT to maximum.
10. Select GDRV and BDRV with **2** and **4**.
11. Adjust with 3 and 6 for the best white balance.
12. Write into the memory by pressing **3** then **5**.
13. Repeat steps 1-12 for GDR4, BDR4, GCU4 and BCU4 using Video 4 input.

\* Use values from Sub Contrast Adjustments

White balance should be adjusted after Sub Contrast because RDRV is also used in Sub Contrast Adjustment. (See page 22).

## SECTION 3: SAFETY RELATED ADJUSTMENTS

### 3-1. **█ R530, R531 CONFIRMATION METHOD (HOLD-DOWN CONFIRMATION) AND READJUSTMENTS**

Always perform the following adjustments when replacing the following components marked with a █ mark on the schematic diagram:

Part Replaced (█)	Adjustment (█)
<b>A BOARD:</b> R550, T503, T504, D519, IC501, R533, D521, R532, D520, C531, R529, R530, R531, C532	<b>HV HOLD DOWN</b> R530, R531

#### PREPARATION BEFORE CONFIRMATION

1. Using a Variac, apply AC input voltage: 120+2.0 VAC.
2. Turn the POWER switch ON.
3. Input a white signal and set the PICTURE and BRIGHT controls to maximum.
4. Confirm that the voltage of more than 23.0 VDC appears between TP85 and ground on the A Board.

#### HOLD-DOWN OPERATION CONFIRMATION

1. Connect the current meter between Pin 11 of the FBT (T503) and the PWB land where Pin 11 would normally attach. (See Figure 1).
2. Input a dot signal and set PICTURE and BRIGHTNESS to minimum: IABL = 2175 + 100/ -325 µA.
3. Confirm the voltage of A Board TP91 is  $135 \pm 1.5$  VDC.
4. Connect the digital voltmeter and the DC power supply to TP85 and ground. (See Figure 1 above).
5. Increase the DC power voltage gradually until the picture blinks out.
6. Turn DC power source off immediately.
7. Read the digital voltmeter indication (standard =  $27.24 + 0.0/-0.1$  VDC).
8. Input a white signal and set PICTURE and BRIGHTNESS to maximum: IABL = 2175 + 100/ -325 µA.
9. Repeat steps 4 to 7.

#### HOLD-DOWN READJUSTMENT

If the setting indicated in Step 2 of Hold-Down Operation Confirmation cannot be met, readjustment should be performed by altering the resistance value of R530, R531 component marked with █.

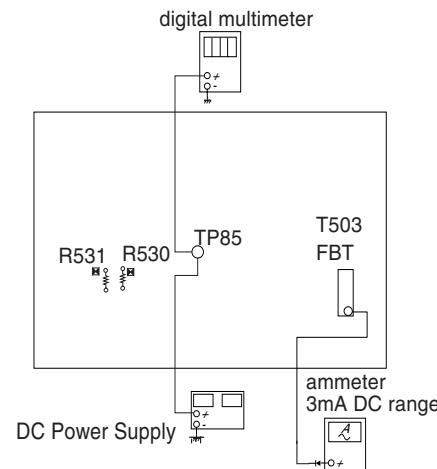


Figure 1

### 3-2. **B+ VOLTAGE CONFIRMATION AND ADJUSTMENT**

Always perform the following adjustments when replacing the following components, which are marked with █ on the schematic diagram on the GK Board:

**GK BOARD: IC600, PH602**

1. Using a Variac, apply AC input voltage:  $130 + 2.0/-0.0$  VAC
2. Input a monoscope signal.
3. Set the PICTURE control and the BRIGHT control to minimum.
4. Confirm the voltage on A Board between TP23 and ground is less than 136.5 VDC.
5. If step 4 is not satisfied, replace R530 and R531 on A Board and repeat the above steps.

## SECTION 4: CIRCUIT ADJUSTMENTS

### ELECTRICAL ADJUSTMENTS BY REMOTE COMMANDER

Use the Remote Commander (RM-Y181, RM-Y182) to perform the circuit adjustments in this section.

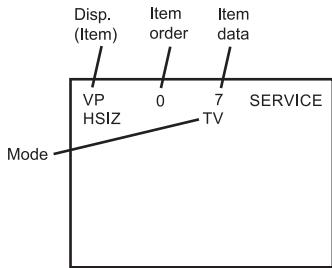
**Test Equipment Required:** 1. Pattern generator 2. Frequency counter 3. Digital multimeter 4. Audio oscillator

#### 4-1. SETTING SERVICE ADJUSTMENT MODE

1. Standby mode (Power off).
2. Press the following buttons on the remote commander within a second of each other:

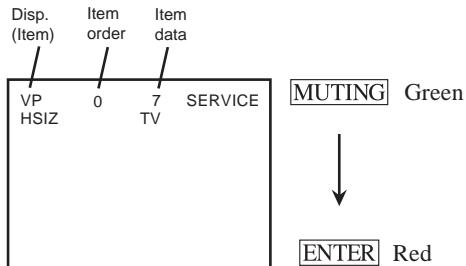
DISPLAY → Channel 5 → Sound Volume + → Power

#### SERVICE ADJUSTMENT MODE IN

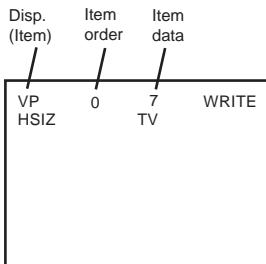


3. The CRT displays the item being adjusted.
4. Press 1 or 2 on the Remote Commander to select the item.
5. Press 3 or 6 on the Remote Commander to change the data.
6. Press MUTING then ENTER to write into memory.

#### SERVICE ADJUSTMENT MODE MEMORY



7. Press then on the Remote Commander to initialize.

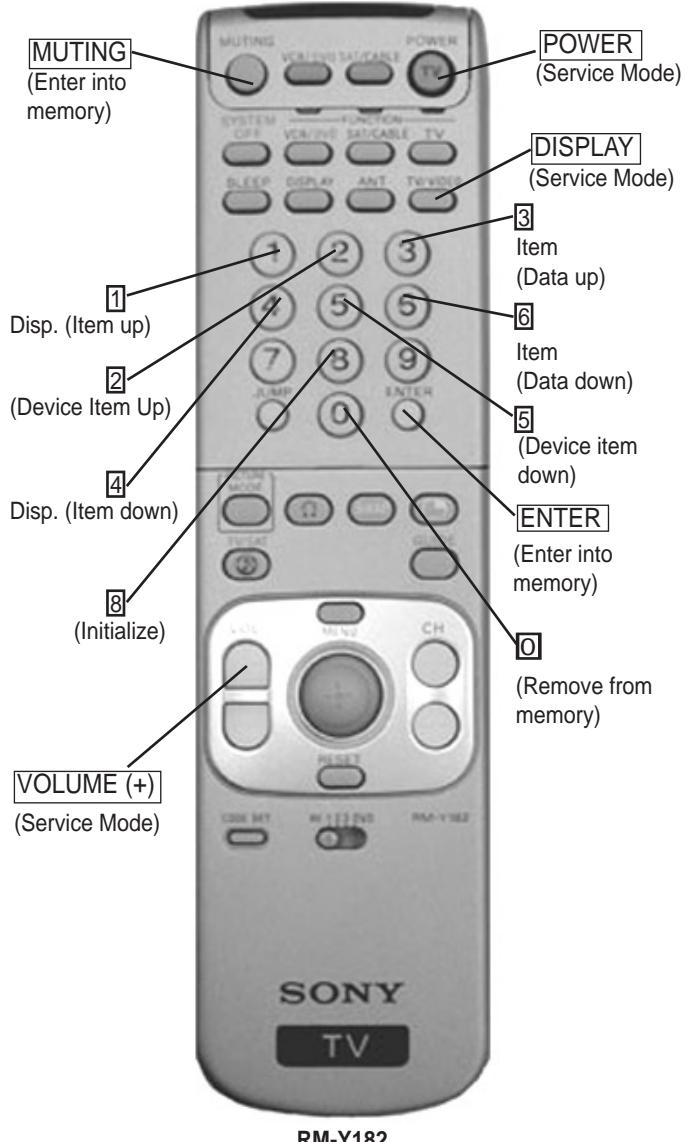


8. DO NOT turn off set until SERVICE appears.

#### 4-2. MEMORY WRITE CONFIRMATION METHOD

1. After adjustment, pull out the plug from the AC outlet, then replace the plug in the AC outlet again.
2. Turn the power switch ON and set to Service Mode.
3. Call the adjusted items again to confirm they were adjusted.

#### 4-3. REMOTE ADJUSTMENT BUTTONS AND INDICATORS



RM-Y182

## 4-4. SERVICE DATA LISTS

### Non-Volatile Memory (NVM) Reference for BA5D Service List

Service Group	No.	Name	Description	Bit Mask	Common		
					Slave Addr	Sub Addr	Init Data
VERSION	0	VER	Microprocessor version information	11111111	=	=	0

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common			NTSC / PAL-M			PAL-N			
						Slave Addr	Sub Addr	Fix Data	Var Data	Slave Addr	Sub Addr	Data	Slave Addr	Sub Addr	Data
VP1	0	HSIZ	Var	H SIZE (11/ 2-7)	11111100					A4	A8		A4	B4	
	1	HPOS	Var	HPOS (12 / 2-7)	11111100					A4	A9		A4	B5	
	2	VBOW	Var	AFC BOW (16 / 4-7)	11110000					A4	AE		A4	BA	
	3	VANG	Var	AFC ANGLE (16 / 0-3)	00001111					A4	AE		A4	BA	
	4	VTRP	Var	TRAPEZIUM (20 / 3-7)	11111000					A4	AF		A4	BB	
	5	HTRP	Var	H. TRAPEZOID (15 / 4-7)	11110000					A4	AD		A4	B9	
	6	TROT	Fix	TIILT ROTATION (0-63)	11111100					A4	A4		A4	B0	
	7	PAMP	Var	PIN AMP (13 / 2-7)	11111100					A4	AA		A4	B6	
	8	UPIN	Var	UP-CPIN (14 / 2-7)	11111100					A4	AB		A4	B7	
	9	LPIN	Var	LO-CPIN (1C / 2-7)	11111100					A4	AC		A4	B8	
	10	VSIZ	Var	V SIZE (0E / 2-7)	11111100					A4	A5		A4	B1	
	11	VPOS	Var	V POSITION (0E / 2-7)	11111100					A4	A6		A4	B2	
	12	VLIN	Var	V LINEARITY (10 / 0-3)	00001111					A4	A7		A4	B3	
	13	SCOR	Var	S CORRECTION (10 / 4-7)	11110000					A4	A7		A4	B3	
	14	VZOM	Fix	16:9 CRT Z Mode on/off	10000000	A4	85								
	15	EHT	Fix	Vertical High-Voltage Compensation	00001111	A4	80								
	16	ASP	Fix	Aspect Ratio control (4:3 Mode)	11111100	A4	FB	47							
	17	ASP1	Fix	Aspect Ratio control (16:9 Mode)	11111100	A4	FC	47							
	18	SCRL	Fix	16:9 CRT Z Mode Trans. Scroll	00111111	A4	86								
	19	HBLK	Fix	Horizontal Blanking on/off	00010000	A4	85								
	20	LBLK	Fix	Left Blanking Adjustment	11110000	A4	80								
	21	RBLK	Fix	Rigth Blanking Adjustment	00001111	A4	81								
	22	HDW	Fix	Horizontal Drive Pulse Width	00001000	A4	85								
	23	EWDC	Fix	"Parabola" EW, D.C. Adjustment	00000100	A4	88								
	24	LVLN	Fix	Lower Screen BTM Vertical Line Adj.	11110000	A4	81								
	25	UVLN	Fix	Uppe Screen BTM Vertical Line Adj.	00001111	A4	82								
	26	INTL	Fix	INTERLACE	00110000	A4	84								
	27	HOSC	Fix	Horizontal VCO Oscillation Freq.	11110000	A4	82								
	28	VSS	Fix	Vertical Sync Slice Level	11000000	A4	84								
	29	HSS	Fix	Horizontal Sync Slice Level	00001000	A4	88								
	30	HMSK	Fix	For Macro Vision	00010000	A4	88								
	31	VTMS	Fix	Select Signal VTIM Pin	01100000	A4	85								
	32	TCMD	Fix	Vertical Count Down Mode Switching (for TV)	00000011	A4	8C								
	33	VCMD	Fix	Vertical Count Down Mode Switching (for Video)	00000011	A4	8D								
	34	AFC	Fix	AFC Loop Gain Switching	11000000	A4	86								
	35	FIFR	Fix	Field Frequency	11000000	A4	87								
	36	VBLK	Fix	VBLKW	00000011	A4	88								
	37	HTSW	Fix	H-Trap Switch : NEW	00100000	A4	88								

## SERVICE DATA LISTS

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common				NTSC			PAL-M			PAL-N		
						Slave Addr	Sub Addr	Fix Data	Var Data	Slave Addr	Sub Addr	Data	Slave Addr	Sub Addr	Data	Slave Addr	Sub Addr	Data
VP2	0	REFP	Fix	REFP	01000000	A4	88	0										
	1	JPSW	Fix	Jump SW	00000001	=	=											
	2	SHUE	Var	Sub HUE adjustment	11110000	A4	8C											
	3	SCOL	Var	Sub COLOR adjustment	00001111									A4	8E			
	4	SBRT	Var	Sub BRIGHTNESS adjustment	00011111	A4	87											
	5	AXPL	Fix	Axis PAL	00000001	A4	89	0										
	6	AXNT	Fix	Axis NTSC	00000010	A4	89	1										
	7	CBPF	Fix	Chroma BPF on/off	00000100	A4	89	1										
	8	CTRP	Fix	Y TRAP FILTER on/off	00000001	=	=											
	9	COFF	Fix	Color On/off	00000010	=	=											
	10	KOFF	Fix	Set Color Killer	00100000	A4	89	0										
	11	SSHP	Fix	Sub SHARPNESS	11110000	A4	83											
	12	TSPF	Fix	SHARPNESS Circuit Fo (for TV)	00001100	A4	8C											
	13	VSPF	Fix	SHARPNESS Circuit Fo (for Video)	00001100	A4	8D											
	14	PREL	Fix	Pre-Shoot/ Over-Shoot	01000000	A4	89	1										
	15	ABLM	Fix	ABL Mode Switch	10000000	A4	89	1										
	16	VTH	Fix	ABL CD VHT Switching	00000001	=	=											
	17	YDEL	Fix	Y Delay Time Control	00001111	A4	84											
	18	NCOL	Fix	No Color ID	00000001	A4	85											
	19	FSC	Fix	FSC Out on/off	00000010	A4	85	1										
	20	KID	Fix	Killer ID Control on/off	00000100	A4	85	0										

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common				NTSC			PAL-M			PAL-N		
						Slave Addr	Sub Addr	Fix Data	Var Data	Slave Addr	Sub Addr	Data	Slave Addr	Sub Addr	Data	Slave Addr	Sub Addr	Data
VID_ADJ	0	RDRV	var	R DRIVE (0A / 7-2)	11111100	A4	9E	41										
	1	GDRV	Var	G DRIVE (0B / 7-2)	11111100	A4	9F											
	2	BDRV	Var	B DRIVE (0C / 7-2)	11111100	A4	A0											
	3	RCUT	Var	R CUT OFF (07 / 7-2)	11111100	A4	A1	31										
	4	GCUT	Var	G CUT OFF (08 / 7-2)	11111100	A4	A2											
	5	BCUT	Var	B CUT OFF (09 / 7-2)	11111100	A4	A3											
	6	SCON	Var	Sub Contrast adjustmst	00001111	A4	8A											
	7	CHUE	Var	Sub HUE adjustment for TV	00011111	A4	94	16										
	8	CCOL	Var	Sub COLOR adjustment for TV	00011111									A4	8F	18		
	9	UOFS	Var	YUV U offset	00001111	A4	8B							A4	91	18		
	10	VOFS	Var	YUV V offset	11110000	A4	8B											
	11	RON	Fix	R ON (01 / 3)	00001000	=	=											
	12	GON	Fix	G ON (01 / 2)	00000100	=	=											
	13	BON	Fix	B ON (01 / 1)	00000010	=	=											
	14	HUEV	Var	Sub HUE adjustment for Video	11110000	A4	8D											
	15	COLV	Var	Sub COLOR adjustment for Video	11110000									A4	8E			
														A4	90			
														A4	92			

## SERVICE DATA LISTS

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
COL_TMP	0	GDOF	Fix	G DRIVE Offset	11111000	A4	9A	4
	1	BDOF	Fix	B DRIVE Offset	11111000	A4	9B	15
	2	GCOF	Fix	G CUT Offset	11111000	A4	9C	7
	3	BCOF	Fix	B CUT Offset	11111000	A4	9D	14
	4	DCOL	Fix	Dinamic Color	00000010	=	=	

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
PIC_IMP	0	BLAD	Fix	Black area detect (01 / 6-7)	11000000	A4	09	0
	1	SRTS	Fix	SRT level (01 / 4-5)	00110000	A4	09	3
	2	YNR	Fix	YNR(01 / 2)	00000100	A4	09	1
	3	GIRE	Fix	Gamma correction(01 / 0-1)	00000011	A4	09	3
	4	DAC1	Fix	DAC1(02 / 7)	10000000	A4	0A	0
	5	DAC2	Fix	DAC2(02 / 6)	01000000	A4	0A	0
	6	VMGA	Fix	VM on 1226 (02/5-4)	00110000	A4	0A	0
	7	GCUR	Fix	Gamma curve(02 / 2)	00000100	A4	0A	1
	8	BLKC	Fix	Black Compensation (02 / 1)	00000010	A4	0A	1
	9	TEST	Fix	TEST(03 / 6-7)	11000000	A4	0B	3
	10	RS	Fix	RS (03 / 3-5)	00111000	A4	0B	0
	11	RTC	Fix	RTC(03 / 0-2)	00000111	A4	0B	2
	12	APAC	Fix	APAC	10000000	A4	0B	0
	13	SRTH	Fix	SRT bit for Dynablack = High	10000000	A4	5C	1
	14	SRTL	Fix	SRT bit for Dynablack = Low	10000000	A4	5D	1
	15	SRTO	Fix	SRT bit for Dynablack = Off	10000000	A4	5E	0
	16	SHPH	Fix	Sharpness level for Dynablack = High	01111111	A4	5C	54
	17	SHPL	Fix	Sharpness level for Dynablack = Low	01111111	A4	5D	43
	18	SHPO	Fix	Sharpness level for Dynablack = Off	01111111	A4	5E	0

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Palette = VIVID			Palette = STANDARD			Palette = MOVIE			Palette = SPORTS		
						Slave Addr	Sub Addr	Fix Data	Slave Addr	Sub Addr	Fix Data	Slave Addr	Sub Addr	Fix Data	Slave Addr	Sub Addr	Fix Data
PALETTE	0	VPIC	Fix	User picture setting 0:min, 63: max	11111100	A4	5F	63	A4	65	50	A4	6B	38	A4	71	63
	1	VBRT	Fix	User brightness setting 0:min, 63: max	11111100	A4	60	31	A4	66	31	A4	6C	31	A4	72	31
	2	VCOL	Fix	User color setting 0:min, 63: max	11111100	A4	61	35	A4	67	31	A4	6D	31	A4	73	40
	3	VSHP	Fix	User sharpness setting 0:min, 63: max	11111100	A4	62	31	A4	68	31	A4	6E	34	A4	74	31
	4	VVM	Fix	0: OFF, 1: Low, 2: High, 3: N/A	00000011	A4	5F	2	A4	65	1	A4	6B	0	A4	71	2
	5	VTRI	Fix	0: Cool, 1: Nutral, 2: Warm, 3: N/A	00000011	A4	60	0	A4	66	1	A4	6C	2	A4	72	0
	6	VGMA	Fix	0: OFF, 1: Low, 2: Mid, 3: Max	00000011	A4	63	2	A4	69	2	A4	6F	2	A4	75	2
	7	VNRM	Fix	0: 3D, 1: 2D	00000010	A4	61	0	A4	67	0	A4	6D	0	A4	73	0
	8	VYDC	Fix	DC Transmission Ratio 0,1: 100%, 2: 92%, 3: 85	00000011	A4	62	3	A4	68	3	A4	6E	2	A4	74	3
	9	VVEN	Fix	Vertoca; Enhancement	00011100	A4	63	5	A4	69	3	A4	6F	3	A4	75	5
	10	VHKO	Fix	Horizontal Peaking 0:On, 1:Off	00000001	A4	61	0	A4	67	0	A4	6D	0	A4	73	0
	11	VDBK	Fix	User Dynablack 0: OFF, 1: Low, 2: High, 3: N/A	01100000	A4	63	2	A4	69	1	A4	6F	1	A4	75	1
	12	VYPL	Fix	Y-Peaking Limit	00000011	A4	64	1	A4	6A	0	A4	70	0	A4	76	1

## SERVICE DATA LISTS

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
3L_COMB	0	FUNN	Fix	Function (0 / 7-6) for NTSC	11000000	A4	3C	3
	1	FUNP	Fix	Function (0 / 7-6) for PAL-N, PAL-M	00110000	A5	3C	3
	2	DRNG	Fix	DRANG (0 / 2)	00000100	A4	3C	0
	3	YCSM	Fix	Y/C Sep Mode (0 / 1-0)	00000011	A4	3C	0
	4	CNRK	Fix	CNRK (1 / 7-6)	11000000	A4	3D	1
	5	CNRL	Fix	CNR Lim (1 / 5-4)	00110000	A4	3D	1
	6	CLPF	Fix	C-LPF(1 / 3)	00001000	A4	3D	1
	7	SLPF	Fix	SelC-LPF(1 / 2)	00000100	A4	3D	0
	8	MODE	Fix	Mode1 (1 / 1)	00000010	A4	3D	0
	9	YPG	Fix	Y - Peaking Gain (2 / 7-6)	11000000	A4	3E	3
	10	PDSC	Fix	Pds. Clip (2 / 3)	00001000	A4	3E	0
	11	YLPF	Fix	Y-LPF(2 / 2)	00000100	A4	3E	1
	12	VENL	Fix	V-Emph N.L (3 / 4-2)	00011100	A4	3F	4
	13	VEC	Fix	V - Emph Core (3 / 1-0)	00000011	A4	3F	3

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
3D_COMB	0	COUT	Fix	COUTS(00 / 2-3)	00001100	A4	21	3
	1	YAPS	Fix	YAPS(00 / 0-1)	00000011	A4	21	1
	2	NSDS	Fix	NSDS(01 / 4-5)	00110000	A4	22	0
	3	MSS	Fix	MSS(01 / 2-3)	00001100	A4	22	0
	4	KILS	Fix	KILS (01 / 1-0)	00000011	A4	22	1
	5	DYC	Fix	DYCOS (02 / 7-6)	11000000	A4	23	2
	6	EXAD	Fix	EXADINS(02 / 5)	00100000	A4	23	0
	7	EXCS	Fix	EXCSS(02 / 1-0)	00000011	A4	23	1
	8	CPP	Fix	CPP(03 / 6)	01000000	A4	24	0
	9	HDP	Fix	HDP(03 / 3-5)	00111000	A4	24	6
	10	CDL	Fix	CDL(03 / 0-2)	00000111	A4	24	6
	11	DYCO	Fix	DYCOR(04 / 4-7)	11110000	A4	25	2
	12	DYGA	Fix	DYGAIN(04 / 0-3)	00001111	A4	25	10
	13	DCCO	Fix	DCCOR(05 / 4-7)	11110000	A4	26	2
	14	DCGA	Fix	DCGAIN(05 / 0-3)	00001111	A4	26	9
	15	YNRL	Fix	YNRLIM(06 / 4-5)	00110000	A4	27	1
	16	CNRL	Fix	CNRLIM(06 / 0-1)	00000011	A4	27	1
	17	ID10	Fix	ID1ON(07 / 7)	10000000	A4	28	0
	18	ID1W	Fix	ID1W0A1(07 / 6)	01000000	A4	28	0
	19	ID1N	Fix	ID1W0A2(07 / 5)	00100000	A4	28	0
	20	WSC	Fix	WSC(08 / 6-7)	11000000	A4	29	1
	21	VTRH	Fix	VTRH(08 / 4-5)	00110000	A4	29	1
	22	VTRR	Fix	VTRR(08 / 2-3)	00001100	A4	29	1
	23	LDSR	Fix	LDSR(08 / 0-1)	00000011	A4	29	2
	24	WSS	Fix	WSS (09 / 7)	10000000	A4	2A	0
	25	ID1E	Fix	ID1ECON (09 / 6)	01000000	A4	2A	1
	26	TT	Fix	TT (09 / 4-5)	00110000	A4	2A	0
	27	FELC	Fix	FELCHK (09 / 3)	00001000	A4	2A	1
	28	TH	Fix	TH (09 / 1-2)	00000110	A4	2A	0
	29	VAPG	Fix	VAPGAIN(0A / 5-7)	11100000	A4	2B	3
	30	VAPI	Fix	VAPINV(0A / 0-4)	00011111	A4	2B	25

## SERVICE DATA LISTS

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
3D_COMB	31	YPFT	Fix	YPFT(0B / 4-5)	00110000	A4	2C	3
	32	YPFG	Fix	YPFG(0B / 0-3)	00001111	A4	2C	8
	33	V1PS	Fix	V1PS(0C / 6-7)	11000000	A4	2D	3
	34	VEGS	Fix	VEGS(0C / 4-5)	00110000	A4	2D	2
	35	CC3N	Fix	CC3N(0C / 3)	00001000	A4	2D	0
	36	C0HS	Fix	C0HS(0C / 2)	00000100	A4	2D	0
	37	SEL2	Fix	SELD2FH(0C / 0)	00000001	A4	2D	1
	38	SEL1	Fix	SELD1FL(0D / 5)	00100000	A4	2E	1
	39	YHCO	Fix	YHCOR(10 / 6-7)	11000000	A4	31	0
	40	YHCG	Fix	YHCGAIN(10 / 5)	00100000	A4	31	1
	41	OVST	Fix	+OVST(10 / 3)	00001000	A4	31	0
	42	CSHD	Fix	CSHDT(10 / 2)	00000100	A4	31	0
	43	KCTT	Fix	KCTT(10 / 0-1)	00000011	A4	31	0
	44	SHT	Fix	SHT(11 / 7-6 )	11000000	A4	32	0
	45	VCT	Fix	VCT(11/ 5)	00100000	A4	32	0
	46	CGAT	Fix	CLKGAT ( 11 / 4)	00010000	A4	32	0
	47	CG2D	Fix	CLK2D ( 11 / 3)	00001000	A4	32	1
	48	CGGT	Fix	CLKGGT ( 11 / 2)	00000100	A4	32	0
	49	CGEB	Fix	CLKGEB ( 11 / 1)	00000010	A4	32	0
	50	CGT	Fix	CLKGT ( 11 / 0)	00000001	A4	32	0
	51	HPLL	Fix	HPLLFS(12 / 7)	10000000	A4	33	1
	52	BPLL	Fix	BPLLFS (12 / 6)	01000000	A4	33	0
	53	FSCF	Fix	FSCFG(12 /5)	00100000	A4	33	0
	54	PLLF	Fix	PLLFG(12 / 4)	00010000	A4	33	1
	55	KILR	Fix	KILR(12 / 0-3)	00001111	A4	33	3
	56	HSSL	Fix	HSSL(13 / 4-7)	11110000	A4	34	12
	57	VSSL	Fix	VSSL(13 / 0-3)	00001111	A4	34	8
	58	BGPS	Fix	BGPS(14 / 4-7)	11110000	A4	35	4
	59	BGPW	Fix	BGPW(14 / 0-3)	00001111	A4	35	10
	60	ADCL	Fix	ADCLKS(15 / 6-7)	11000000	A4	36	3
	61	NSDW	Fix	NSDSW(15 / 4)	00010000	A4	36	1
	62	HIZE	Fix	HIZEN ( 16 / 4)	00010000	A4	37	0
	63	HCNT	Fix	HCNTFSYN ( 17 / 6)	01000000	A4	38	0

## SERVICE DATA LISTS

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
PIP	0	PFRN	Fix	VCXO oscilation	00000010	A4	40	0
	1	PRVS	Fix	HD/VD input synchronous mode selection	00000001	A4	40	1
	2	PCON	Fix	PIP sub contrast control	01111111	A4	41	97
	3	PUCO	Fix	PIP U level control	01111111	A4	42	5
	4	PVCO	Fix	PIP V level control	01111111	A4	43	17
	5	PHUE	Fix	PIP sub hue control	00111111	A4	57	12
	6	PKIL	Fix	Color killer	10000000	A4	42	0
	7	PSEP	Fix	C-sync sep input selection	11000000	A4	44	1
	8	PDCN	Fix	Sub pic sync sep. Thereshold setting	00110000	A4	44	3
	9	PBGS	Fix	bgp position setting	00111111	A4	45	15
	10	PDL0	Fix	Y/C delay adjust (for video)	00001111	A4	46	11
	11	PDL1	Fix	Y/C delay adjust (for yuv)	11110000	A4	46	13
	12	PBRT	Fix	Y bryghtness control	00011111	A4	48	25
	13	PVP1	Fix	V pedestal level for YUV	11110000	A4	49	0
	14	PUP1	Fix	U pedestal level for YUV	00001111	A4	49	0
	15	PVP2	Fix	V pedestal level for main w/ burst	11110000	A4	4A	0
	16	PUP2	Fix	U pedestal level for main w/ burst	00001111	A4	4A	0
	17	PVP3	Fix	V pedestal level for main w/o burst	11110000	A4	4B	0
	18	PUP3	Fix	U pedestal level for main w/o burst	00001111	A4	4B	0
	19	PACS	Fix	0D, 0Eh setting mode	01000000	A4	4C	1
	20	PSYS	Fix	Color system	00110000	=	=	
	21	PSDL	Fix	Sync delay control	00000011	A4	4C	0
	22	PCCL	Fix	YUV color level	11110000	A4	4D	11
	23	PCGA	Fix	Croma gain	00001000	A4	4D	0
	24	PAAF	Fix	Auto AFC	00000100	A4	4D	1

## SERVICE DATA LISTS

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
PIP	25	PSU2	Fix	For test	00000010	A4	4D	0
	26	PCVF	Fix	Internal 1H comb filter	00000001	A4	4D	0
	27	PBIT	Fix	Y clamp time constant	10000000	A4	4E	0
	28	PAFC	Fix	AFC time constant	01000000	A4	4E	0
	29	PACC	Fix	Color decoder amplitude	00111111	A4	4E	21
	30	PSDT	Fix	System automatic judgment	10000000	=	=	
	31	PBUR	Fix	VCXO mode selection	01000000	A4	4F	0
	32	PEVE	Fix	Main picture PAL-N	00100000	A4	4F	0
	33	PINW	Fix	Invert sub picture field definition	00010000	A4	4F	0
	34	PINR	Fix	Invert main picture field definition	00001000	A4	4F	0
	35	PVMD	Fix	Vertical display mode when pal-n	00000100	=	=	
	36	PREF	Fix	Main picture field fix	00000010	A4	4F	0
	37	PARE	Fix	Automatic 50/60 Hz judgement	00000001	A4	4F	0
	38	PBWD	Fix	BW det. Treshold setting	00110000	A4	50	1
	39	PFRA	Fix	Freq. Adjustment for free run mode	00001111	A4	51	0
	40	PPAL	Fix	Parameter setting for PAL-M judgment	11111111	A4	52	52
	41	PHPO	Fix	Sub picture h position	00111111	A4	58	3
	42	PVPO	Fix	Sub picture v position	00111111	A4	59	22
	43	PHTI	Fix	Display timing adjust	00001111	A4	44	3
	44	PHAJ	Fix	Main/Sub switch delay control	11110000	A4	47	2
	45	PBGY	Fix	Back ground Y level setting	00001111	A4	53	0
	46	PCRO	Fix	Sub picture read mode	10000000	A4	54	0
	47	PPAR	Fix	Thereshold contol for ident judgement of sub	00001111	A4	50	1
	48	PHPF	Fix	Y output HPF	00010000	A4	51	0
	49	PFSC	Fix	FSC output	10000000	A4	43	0
	50	PVCH	Fix	15h,16h,17h, setting mode	00000100	A4	4C	0
	51	PVON	Fix	V-chip decode mode	10000000	A4	53	1
	52	PVLN	Fix	V-chip data slicer line selection	00011111	A4	54	17
	53	PVSB	Fix	V-chip data slicer start bit detection parameter	11111111	A4	55	64
	54	PVLV	Fix	V-chip data slicer slice parameter	11111111	A4	56	130
	55	SUSW	Fix	Sub-Unlock bit position switch	01000000	A4	59	0

## SERVICE DATA LISTS

Service Group	No.	Name	Fix / Var	Description	Bit Mask	KV-27FV300/29FV300				KV-32FV300/36FV300			
						Slave Addr	Sub Addr	Fix Data	Var Data	Slave Addr	Sub Addr	Fix Data	Var Data
AP	0	SBAL	Fix	Sub Balance	00000111	A8	41		4	A8	41		4
	1	SBAS	Fix	Sub Bass	00000111	A8	43		4	A8	43		4
	2	STRE	Fix	Sub Treble	00000111	A8	42		0	A8	42		0
	3	SRL	Fix	Surround level	00000001	A8	44		0	A8	44		0
	4	BBOH	Fix	Surround Off - BBE high	11110000	A8	45		10	A8	45		10
	5	BBOL	Fix	Surround Off - BBE low	00001111	A8	45		5	A8	45		5
	6	BBSH	Fix	Simulated - BBE high	11110000	A8	46		0	A8	46		0
	7	BBSL	Fix	Simulated - BBE low	00001111	A8	46		0	A8	46		0
	8	BBMH	Fix	Surround - BBE high	11110000	A8	47		0	A8	47		0
	9	BBML	Fix	Surround - BBE low	00001111	A8	47		0	A8	47		0
	10	BBGH	Fix	WOW - BBE high	11110000	A8	48		6	A8	48		6
	11	BBGL	Fix	WOW - BBE low	00001111	A8	48		9	A8	48		9
	12	BBTH	Fix	Trusurround - BBE high	11110000	A8	49		7	A8	49		7
	13	BBTL	Fix	Trusurround - BBE low	00001111	A8	49		8	A8	49		8
	14	VFIX	Fix	Audio output fix data	11111111	A8	4A		244	A8	4A		244
	15	AGCL	Fix	AGC Level	00000110	A8	44		2	A8	44		2

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
CCD	0	DUM0	Fix	Only for testing	11111111	=	=	
	1	VOSD	Fix	Only for testing	00000001	=	=	

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Common		
						Slave Addr	Sub Addr	Fix Data
OP	0	DISP	Fix	OSD Display position	00111111	A4	06	28
	1	RAMW	Fix		00000001	=	=	
	2	ICMP	Fix	Comparison data to determine Non-interlace signal for OSD	00011111	A4	39	4
	3	IPOR	Fix	0:Even, 1: Odd, Other: do not change	00000011	A4	3A	1
	4	FAWD	Fix	1: Forced to auto wide mode, 0: normal	00000100	A0	5D	0
	5	HCLW	Fix	H-Count Lower limit	11111111	A4	02	67
	6	HCHG	Fix	H-Count Higher limit	11111111	A4	03	254
	7	9VTM	Fix	Delay for 9V check subsystem	11111111	A4	04	55
	8	ZDET	Fix	Zero detect relay delay	11111111	A4	05	123

Service Group	No.	Name	Fix / Var	Description	Bit Mask	Slave Addr	Sub Addr	Var Data
ID	0	ID0	Fix	Model variation ID0	11111111	A4	78	SEE ID MAP
	1	ID1	Fix	Model variation ID1	11111111	A4	79	SEE ID MAP
	2	ID2	Fix	Model variation ID2	11111111	A4	7A	SEE ID MAP
	3	ID3	Fix	Model variation ID3	11111111	A4	7B	SEE ID MAP
	4	ID4	Fix	Model variation ID4	11111111	A4	7C	SEE ID MAP
	5	ID5	Fix	Model variation ID5	11111111	A4	7D	SEE ID MAP
	6	ID6	Fix	Model variation ID6	11111111	A4	7E	SEE ID MAP
	7	ID7	Fix	Model variation ID7	11111111	A4	7F	SEE ID MAP

To determine ID's value, ID map must be referred

## 4-5. ID MAP TABLE

Model	Destination	ID-0	ID-1	ID-2	ID-3	ID-4	ID-5	ID-6	ID-7
KV-27FV300	US	89	63	237	98	78	128	6	16
KV-27FV300	CND	89	63	237	82	78	128	6	16
KV-29FV300	E	81	63	237	194	110	128	6	80
KV-32FV300	US	89	63	237	98	78	128	6	24
KV-32FV300	CND	89	63	237	82	78	128	6	24
KV-36FV300	US/HAW	89	63	237	98	78	128	6	24
KV-36FV300	CND	89	63	237	82	78	128	6	24

## 4-6. A BOARD ADJUSTMENTS

### H. FREQUENCY (FREE RUN) CHECK

1. Input a TV mode (RF) with no signal.
2. Connect a frequency counter to base of Q501 (TP-25 H. DRIVE) on the A Board.
3. Check H. Frequency for  $15734 \pm 400$ /-200 Hz.

### V. FREQUENCY (FREE RUN) CHECK

1. Select video 1 with no signal input.
2. Set the conditions for a standard setting.
3. Connect the frequency counter to TP-27 (V OUT) or CN501 pin ⑥ (V DY+) and ground on the A Board.
4. Check that V. Frequency shows  $60 \pm 5$  Hz.

### SUBCONTRAST ADJUSTMENT (RDRV)

1. Input a color-bar signal and set the level to 75%.
2. Set in Standard mode.
3. Activate the Service Adjustment Mode. Set color min pic max.
4. Set GON and BON items. Using ③ and ⑥ set each to the following values. Leave RON set to "1".

Mode	Category	Display Item	Item Data
service	video	rdrv	26
ntsc			

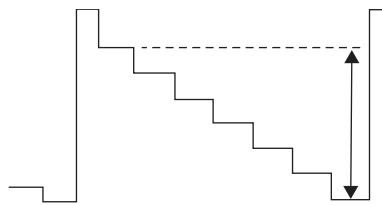
  

Signal Type	Mode	Category	Display Item	Item Data
vchp	service	micro	disp	48

R ON: ON (1)  
G ON: OFF (0)  
B ON: OFF (0)

5. Connect an oscilloscope probe to C Board, CN705 pin 3 (Red Out) (TP35).
6. Select SCON with ① and ④.

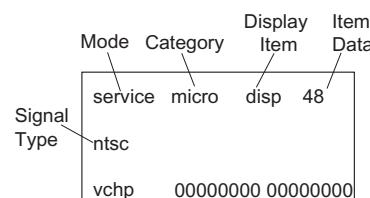
7. Adjust the value of SCON with ③ and ⑥ for  $1.90 \pm 0.05$ Vpp for 27/29/32/34", or  $1.95 \pm 0.05$ Vpp for 36/38".



8. Reset AALS, ABLS, GON and BON values to "1".  
R ON: ON (1)  
G ON: ON (1)  
B ON: ON (1)
9. Press [MUTING] then [ENTER] to save into the memory.

### DISPLAY POSITION ADJUSTMENT (DISP)

1. Input a color-bar signal.
2. Set to Service Adjustment Mode.
3. Select DISP with ① and ④.
4. Adjust values of DISP with ③ and ⑥ to adjust characters to the center.
5. Write to memory by pressing [MUTING] then [ENTER].
6. Check to see if the text is displayed on the screen.



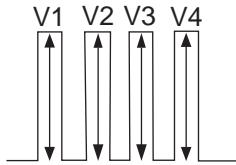
### SUB BRIGHT ADJUSTMENT (SBRT)

1. Input a monoscope signal.
2. Activate the Service Adjustment Mode.
3. Set the PICTURE and BRIGHTNESS to minimum.
4. Select the SBRT item with ① and ④.
5. Adjust the values of SBRT with ③ and ⑥ to obtain a faintly visible crosshatch.
6. Press [MUTING] then [ENTER] to save into the memory.

### SUB HUE, SUB COLOR ADJUSTMENT (SHUE, SCOL)

1. Input color-bar signal at 75%.
2. Activate the Service Adjustment Mode.
3. Set (PIC) to Max and (COL) to 50%.
4. Connect an oscilloscope probe to C Board, CN705Pin ④ Blue Out.
5. Select the SHUE and SCOL item with ① and ④.

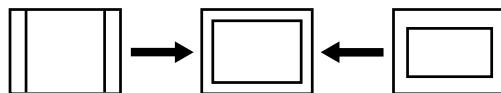
6. While showing the SHUE item, adjust the waveform with **1** and **4** until the second and third bars show the same level ( $V2 = V3 < 0.15V_{p-p}$ ).
7. While showing the SCOL item, adjust the waveform with **3** and **6** until the first and fourth bars show the same level ( $V1 = V4 < 0.15V_{p-p}$ ).



8. Press **MUTING** then **ENTER** to save into the memory.

## V. SIZE ADJUSTMENT (VSIZ)

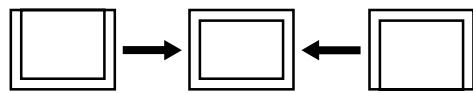
1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the VSIZ item with **1** and **4**.
4. Adjust value of VPOS with **1** and **4** for the best vertical center.
5. Press **MUTING** then **ENTER** to save into the memory.



## V. CENTER ADJUSTMENT (VPOS)

Perform this adjustment after performing H. Frequency (Free Run) Check.

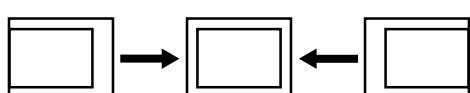
1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the VPOS item with **1** and **4**.
4. Adjust value of VPOS with **3** and **6** for the best vertical center.
5. Press **MUTING** then **ENTER** to save into the memory.



## H. CENTER ADJUSTMENT (HPOS)

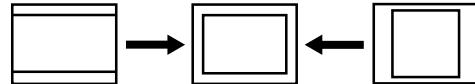
Perform this adjustment after performing H. Frequency (Free Run) Check.

1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select the HPOS item with **1** and **4**.
4. Adjust the value of HPOS with **3** and **6** for the best horizontal center.
5. Press **MUTING** then **ENTER** to save into the memory.



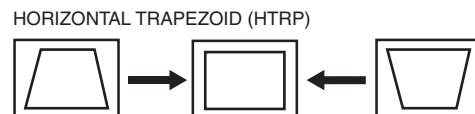
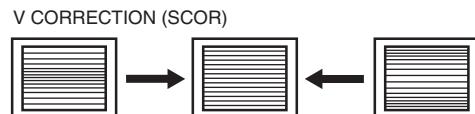
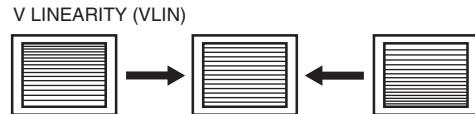
## H. SIZE ADJUSTMENT (HSIZ)

1. Input a monoscope signal.
2. Activate the Service Adjustment Mode.
3. Select HSIZ with **1** and **4**.
4. Adjust with **3** and **6** for the best horizontal size.
5. Press **MUTING** then **ENTER** to save into the memory.



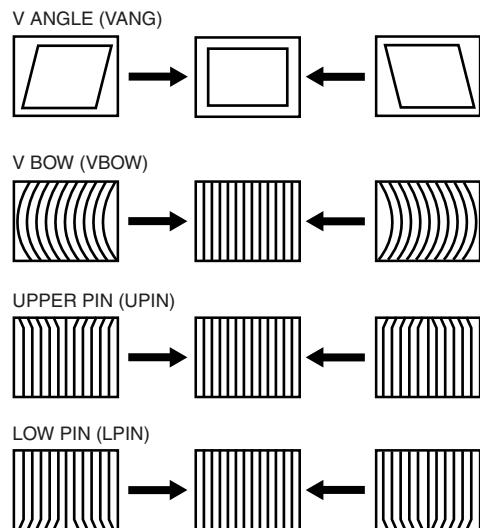
## V. LINEARITY (VLIN), V. CORRECTION (SCOR), PIN AMP (PAMP), AND HORIZONTAL TRAPEZOID (HTRP) ADJUSTMENTS

1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select VLIN, SCOR, PAMP, and HTRP with **1** and **4**.
4. Adjust with **3** and **6** for the best horizontal size.
5. Press **MUTING** then **ENTER** to save into the memory.



## V. ANGLE (VANG), V. BOW (VBOW), UPPER PIN (UPIN) AND LOW PIN (LPIN) ADJUSTMENTS

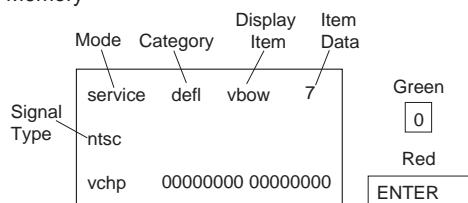
1. Input a crosshatch signal.
2. Activate the Service Adjustment Mode.
3. Select VANG, VBOW, UPIN, and LPIN with **1** and **4**.
4. Adjust with **3** and **6** for the best picture.
5. Press **MUTING** then **ENTER** to save into the memory.



## SERVICE ADJUSTMENT MODE MEMORY

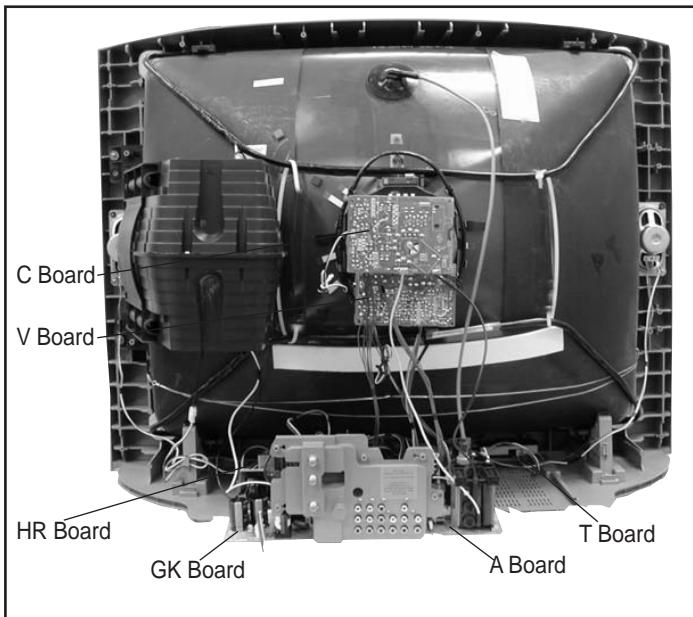
1. After completing all adjustments, press **0** then **ENTER**.

Read From Memory



## SECTION 5: DIAGRAMS

### 5-1. CIRCUIT BOARDS LOCATION



### 5-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS INFORMATION

All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$  :  $\mu\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.

All electrolytics are in 50V unless otherwise specified.

All resistors are in ohms.  $\text{k}\Omega=1000\Omega$ ,  $\text{M}\Omega=1000\text{k}\Omega$

Indication of resistance, which does not have one for rating electrical power, is as follows: Pitch : 5mm

Rating electrical power :  $1/4 \text{ W}$

$1/4 \text{ W}$  in resistance,  $1/10 \text{ W}$  and  $1/8 \text{ W}$  in chip resistance.

: nonflammable resistor

: fusible resistor

: internal component

: panel designation and adjustment for repair

: earth ground

: earth-chassis

All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

Readings are taken with a color-bar signal input.

Readings are taken with a  $10\text{M}\Omega$  digital multimeter.

Voltages are DC with respect to ground unless otherwise noted.

Voltage variations may be noted due to normal production tolerances.

All voltages are in V.

S : Measurement impossibility.

: B+line

: B-line (Actual measured value may be different).

: signal path (RF)

Circle numbers are waveform references.

The components identified by shading and symbol are critical for safety. Replace only with part number specified.

The symbol indicates a fast operating fuse and is displayed on the component side of the board. Replace only with fuse of the same rating as marked.

Les composants identifiés par un trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Le symbole indique une fusible à action rapide. Doit être remplacé par une fusible de même valeur, comme maqué.

The components identified by in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be necessary, replace only with the value originally used.

When replacing components identified by , make the necessary adjustments as indicated. If the results do not meet the specified value, change the component identified by and repeat the adjustment until the specified value is achieved.

(Refer to R530 and R531 adjustment on page 16.)

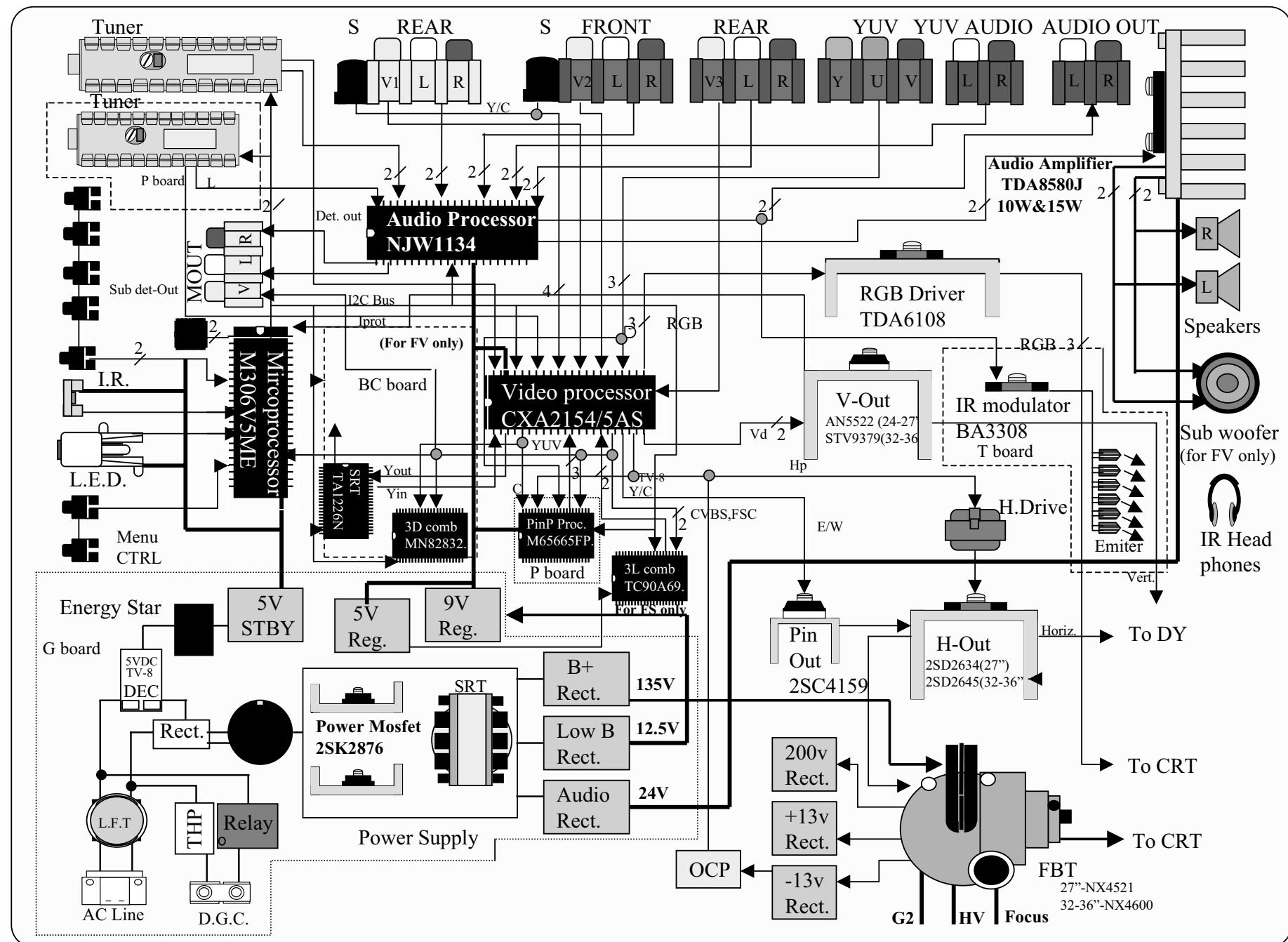
When replacing the parts listed in the table below, it is important to perform the related adjustments.

Part Replaced ()	Adjustment ()
<b>A BOARD:</b> R550, T503, T504, D519, IC501, R533, D521, R532, D520, C531, R529, R530, R531, C532	<b>HV HOLD DOWN</b> R530, R531

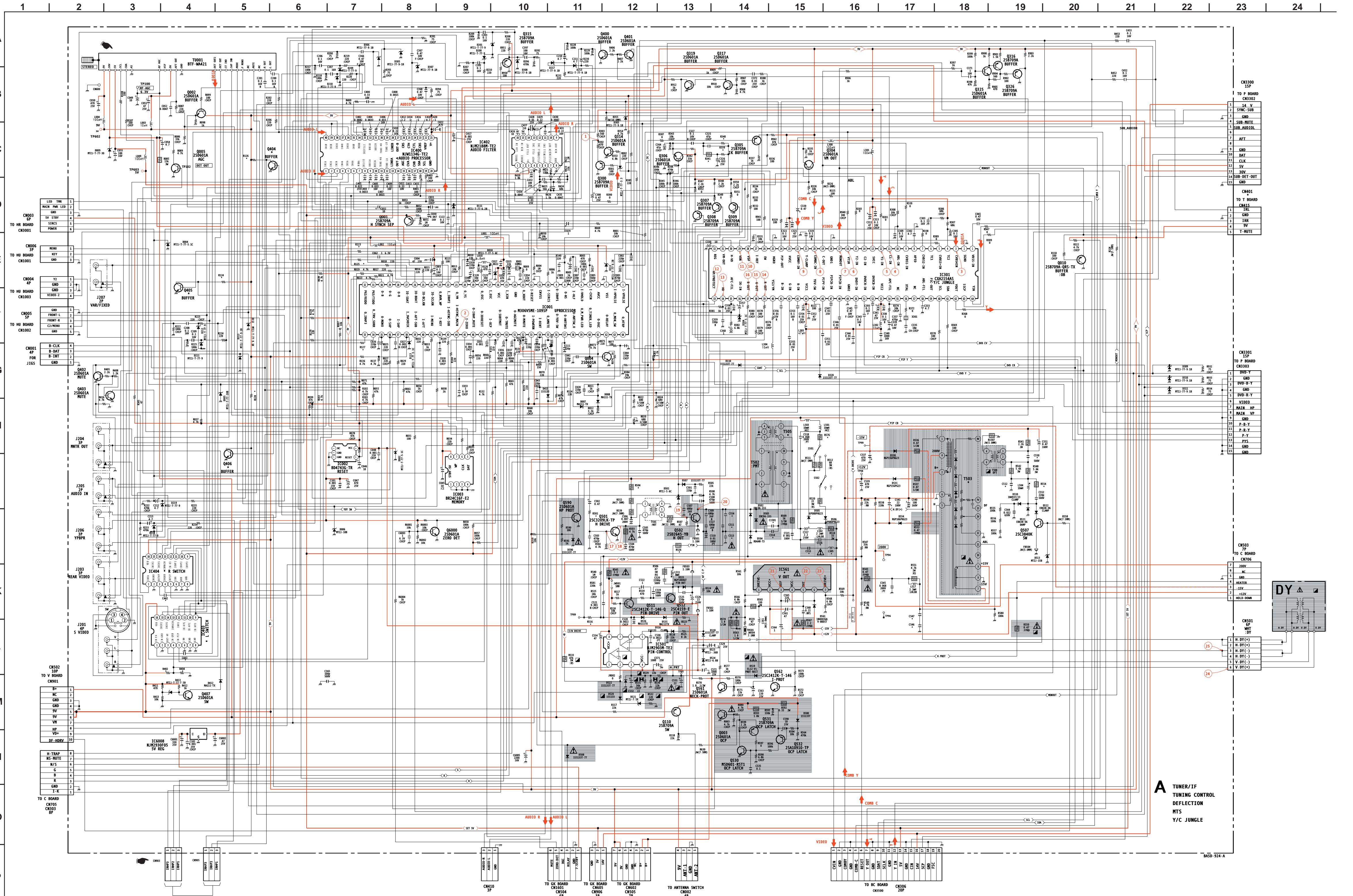
### REFERENCE INFORMATION

RESISTOR	CAPACITOR
: RN METAL FILM	: TA TANTALUM
: RC SOLID	: PS STYROL
: FPRD NONFLAMMABLE CARBON	: PP POLYPROPYLENE
: FUSE NONFLAMMABLE FUSIBLE	: PT MYLAR
: RW NONFLAMMABLE WIREWOUND	: MPS METALIZED POLYESTER
: RS NONFLAMMABLE METAL OXIDE	: MPP METALIZED POLYPROPYLENE
: RB NONFLAMMABLE CEMENT	: ALB BIPOLAR
:  ADJUSTMENT RESISTOR	: ALT HIGH TEMPERATURE
	: ALR HIGH RIPPLE
<b>COIL</b>	
: LF-8L MICRO INDUCTOR	

### 5-3. BLOCK DIAGRAM AND SCHEMATICS

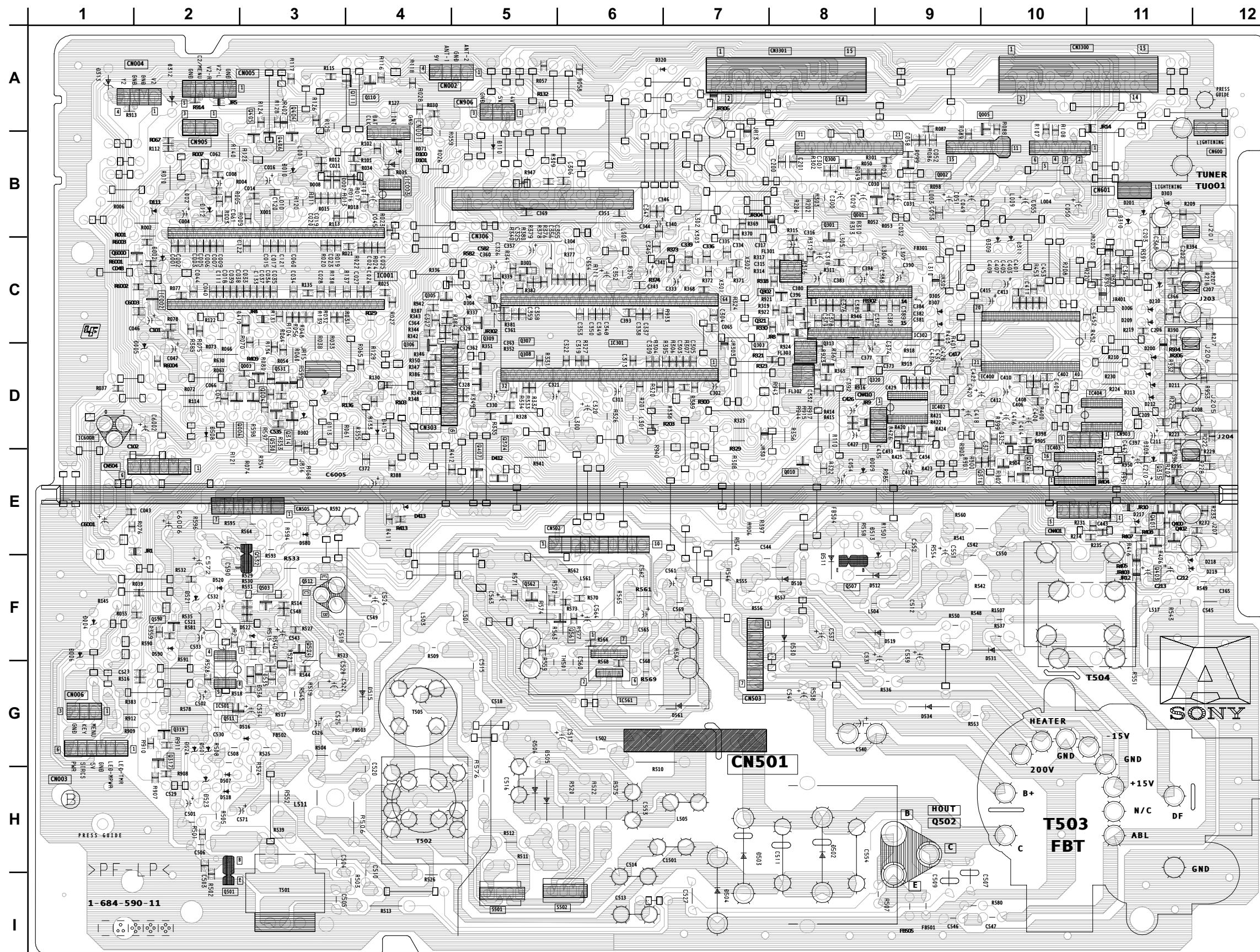


## A BOARD SCHEMATIC DIAGRAM



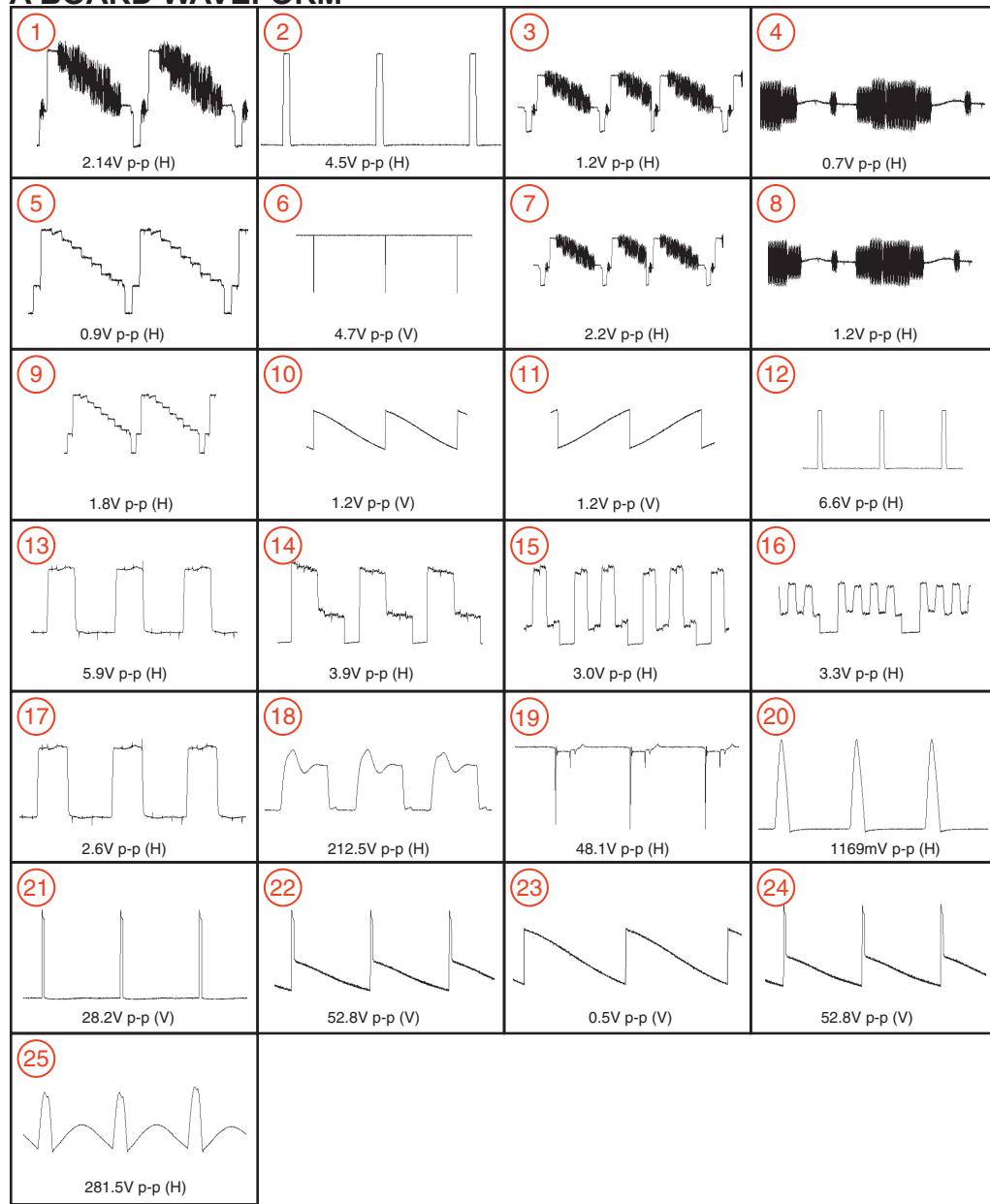
**A**

[TUNING CONTROL, DEFLECTION, TUNER/IF, Y/C JUNGLE, MTS]



## A BOARD LOCATOR LIST

DIODE		D501	G-2	TRANSISTOR	
D002	C-2	D502	H-8	Q001	B-8
D004	F-1	D503	H-7	Q002	B-9
D005	D-2	D504	I-7	Q003	D-3
D006	F-1	D505	H-5	Q004	D-3
D007	B-4	D507	H-2	Q005	A-10
D008	B-3	D508	D-2	Q010	E-8
D009	E-8	D510	F-8	Q110	A-4
D010	B-3	D511	F-8	Q111	A-4
D110	B-5	D512	F-9	Q300	B-8
D111	B-2	D513	F-9	Q304	D-5
D112	B-2	D515	G-4	Q305	C-4
D113	D-3	D516	G-3	Q306	D-4
D200	D-11	D518	H-2	Q307	C-5
D201	B-11	D519	F-9	Q308	D-5
D209	C-11	D520	F-2	Q309	C-5
D210	C-11	D521	F-2	Q314	D-3
D211	D-11	D522	F-3	Q315	E-11
D212	D-11	D523	H-2	Q316	E-10
D213	D-11	D524	G-2	Q317	G-2
D217	E-11	D530	F-8	Q319	G-2
D218	F-12	D531	F-10	Q325	E-10
D219	F-12	D534	G-9	Q326	E-10
D302	D-3	D535	G-3	Q400	E-11
D303	B-11	D536	G-3	Q401	E-11
D304	C-5	D561	G-7	Q402	E-12
D305	C-9	D580	E-3	Q403	E-11
D306	C-11	D590	F-2	Q404	A-3
D307	C-9	IC		Q405	A-3
D308	E-11	IC001	C-3	Q406	B-3
D309	B-10	IC002	C-2	Q407	E-5
D310	B-11	IC003	B-4	Q501	H-2
D311	B-10	IC301	C-6	Q502	H-9
D312	A-2	IC400	D-10	Q507	F-8
D313	A-1	IC402	D-9	Q511	G-3
D320	A-7	IC403	E-10	Q512	F-3
D410	C-2	IC404	D-11	Q530	D-3
D412	E-5	IC501	G-2	Q531	D-3
D413	E-4	IC561	G-6	Q532	F-3
D415	D-4	IC6008	D-1	Q561	F-6
				Q562	F-5
				Q590	F-2
				Q6000	C-1

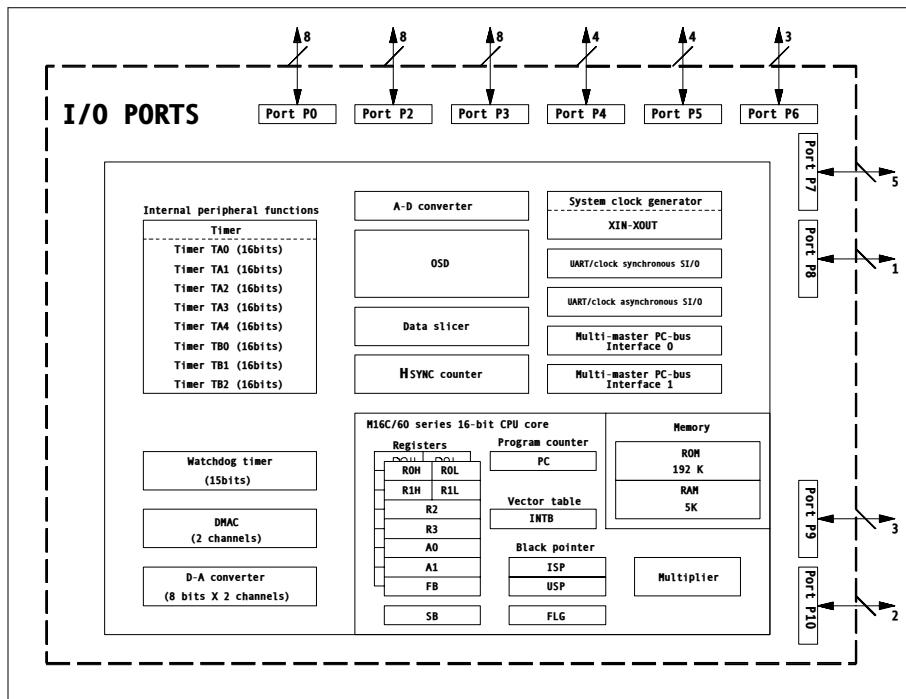
**A BOARD WAVEFORM**

**A BOARD MARK(\*) LIST**

REF. NO.	LOCATION	KV-27FV300 KV-29FV300	KV-32FV300	KV-36FV300
C442	K-3	#	0.22UF	0.22UF
C443	L-4	#	0.22UF	0.22UF
C511	I-13	17000PF	22000PF	22000PF
C512	I-19	0.0039UF	0.0027UF	0.0027UF
C513	J-13	0.047UF	0.051UF	0.051UF
C514	I-14	0.68UF	0.82UF	0.82UF
C516	J-15	1UF	0.82UF	0.82UF
C546	K-17	#	0.001UF	0.001UF
C547	K-17	#	0.001UF	0.001UF
C550	H-19	0.0015UF	680PF	680PF
C553	J-15	0.1UF	0.47UF	0.47UF
C554	I-13	2700PF	4700PF	4700PF
C1501	I-14	#	0.1UF	0.1UF
CN401	D-23	#	5P	5P
IC403	K-4	#	BU4051BCF-E2	BU4051BCF-E2
IC404	J-4	#	BU4051BCF-E2	BU4051BCF-E2
IC561	J-14	TDA8172	STV9379	STV9379
L505	J-15	150UH	68UH	68UH
Q404	C-5	#	2SD601A-QRS-TX	2SD601A-QRS-TX
Q405	E-4	#	2SD601A-QRS-TX	2SD601A-QRS-TX
Q406	H-5	#	2SD601A-QRS-TX	2SD601A-QRS-TX
R123	E-7	#	2.2K	2.2K
R124	E-4	#	220	220
R125	E-7	#	2.2K	2.2K
R126	C-5	#	220	220
R127	F-7	#	2.2K	2.2K
R128	G-5	#	220	220
R339	C-13	330K	39K	39K
R340	C-13	2.2M	3.3M	3.3M
R341	C-13	56K	330K	330K
R402	L-3	#	4.7K	4.7K
R404	L-4	#	4.7K	4.7K
R501	I-11	330	470	470
R504	I-12	68	560	560
R516	K-11	8.2K	5.6K	6.8K
R523	K-13	22K	12K	12K
R526	J-12	4.7	10	10
R554	I-19	15K	2.2K	#
R576	H-15	22	10	10
T503	I-18	8-598-834-20	8-598-824-10	8-598-824-10
T505	H-15	1-431-693-11	1-435-098-11	1-435-098-11

#: Not Mounted

## IC BLOCK DIAGRAM



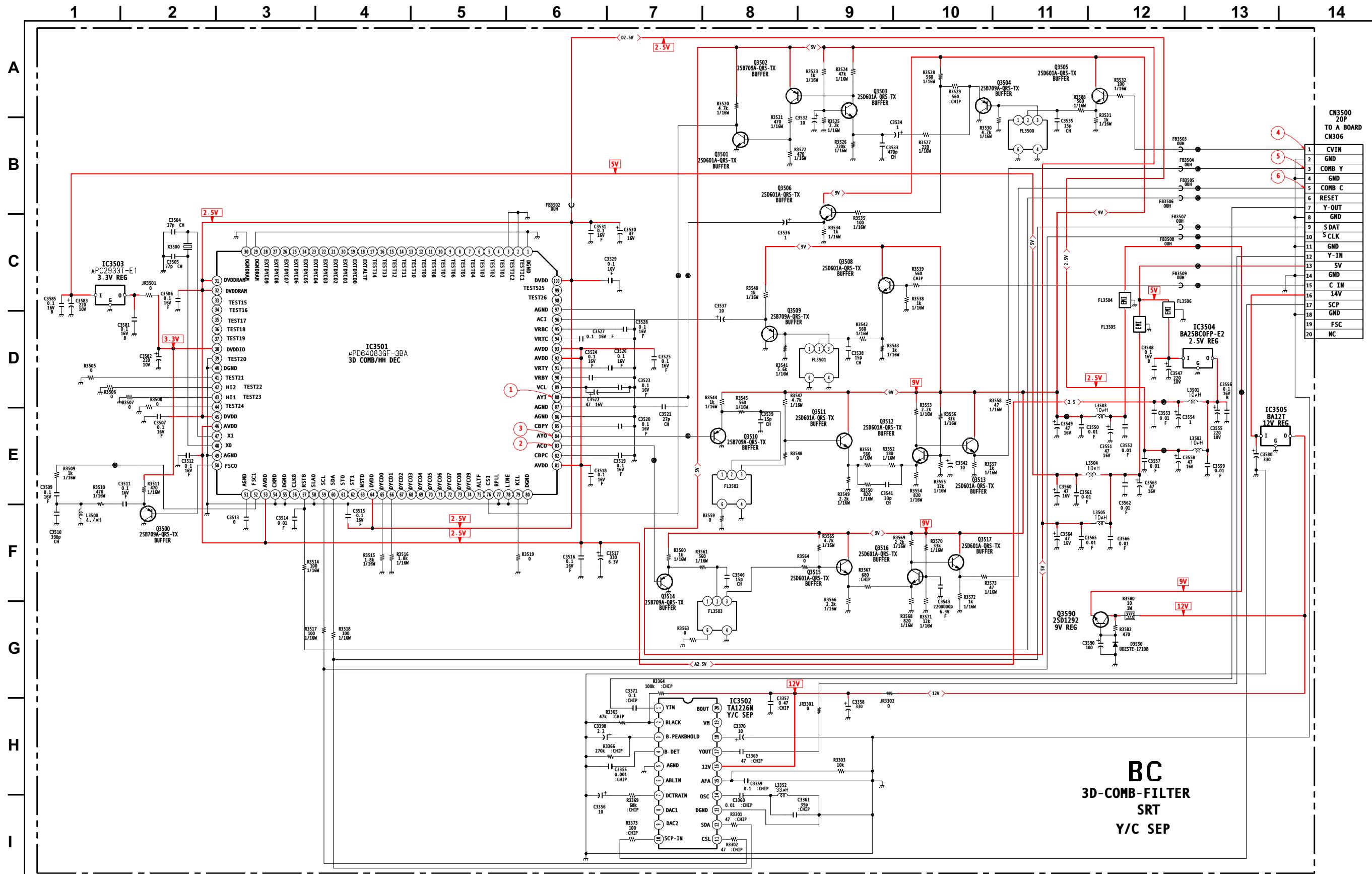
**A BOARD IC VOLTAGE LIST**

IC001		41	5.0	IC301		41	4.6	17	1.7	IC403		5	2.3	
PIN	VOLT	42	5.0	PIN	VOLT	42	4.6	18	4.7	PIN	VOLT	6	2.5	
1	4.9	43	0.2	1	5.0	43	4.6	19	4.7	1	4.5	7	-13.5	
2	0.6	44	0.6	2	GND	44	9.0	20	GND	2	GND	8	12.0	
3	GND	45	1.2	3	5.0	45	0.1	21	9.0	3	4.5	IC561		
4	5.0	46	4.8	4	5.0	46	4.3	22	4.4	4	0.0	PIN	VOLT	
5	0.2	47	4.8	5	4.8	47	5.2	23	3.8	5	4.5	1	1.5	
6	1.7	48	0.0	6	5.0	48	5.2	24	3.8	6	GND	2	12.0	
7	1.4	49	0.1	7	4.8	49	GND	25	4.0	7	GND	3	-12.0	
8	0.5	50	4.4	8	3.4	50	4.8	26	0.6	8	GND	4	-15.0	
9	0.0	51	5.0	9	5.2	51	5.2	27	4.6	9	9.0	5	0.3	
10	5.0	52	0.1	10	1.9	52	5.2	28	4.6	10	9.0	6	14.2	
11	GND	53	0.0	11	0.0	53	9.1	29	4.6	11	9.0	7	1.4	
12	5.0	54	4.8	12	4.8	54	5.3	30	4.6	12	4.5	IC6008		
13	2.3	55	0.1	13	9.0	55	N/C	31	4.6	13	4.5	PIN	VOLT	
14	GND	56	0.0	14	0.0	56	1.7	32	4.6	14	4.5	I	7.5	
15	2.1	57	4.8	15	4.8	57	N/C	33	4.6	15	4.5	O	5.0	
16	5.0	58	N/C	16	4.9	58	6.9	34	4.6	16	9.0	G	GND	
17	2.6	59	N/C	17	4.4	59	N/C	35	4.5	IC404		All voltages are in V.		
18	2.6	60	0.0	18	0.0	60	4.7	36	4.5	PIN	VOLT			
19	0.3	61	0.1	19	3.8	61	4.7	37	4.5	1	4.5			
20	0.0	62	4.6	20	5.5	62	4.7	38	4.5	2	GND			
21	2.1	63	0.1	21	3.6	63	1.1	39	4.5	3	0.4			
22	5.0	64	N/C	22	5.8	64	5.1	40	4.5	4	0.4			
23	5.0	IC002		23	9.0	IC400		IC402		5	4.5			
24	5.0	PIN	VOLT	24	4.4	PIN	VOLT	PIN	VOLT	6	GND			
25	5.0	1	N/C	25	0.0	1	4.5	1	GND	7	0.0			
26	5.0	2	GND	26	4.1	2	4.5	2	0.3	8	GND			
27	5.0	3	GND	27	2.4	3	4.5	3	9.0	9	9.0			
28	0.0	4	5.0	28	3.5	4	4.5	4	4.5	10	9.0			
29	0.0	5	5.0	29	3.5	5	4.5	5	4.5	11	9.0			
30	0.0	IC003		30	5.9	6	4.5	6	4.5	12	4.5			
31	N/C	PIN	VOLT	31	5.5	7	4.5	7	4.5	13	4.5			
32	N/C	1	GND	32	7.6	8	4.5	8	GND	14	4.5			
33	4.8	2	GND	33	3.6	9	4.5	9	4.5	15	4.5			
34	0.0	3	GND	34	2.8	10	4.5	10	4.5	16	9.0			
35	0.0	4	GND	35	2.5	11	4.5	11	4.5	IC501				
36	0.0	5	5.0	36	3.9	12	4.5	12	4.5	PIN	VOLT			
37	0.0	6	5.0	37	1.5	13	4.5	13	4.5	1	-13.3			
38	4.2	7	0.0	38	1.6	14	4.5	14	4.5	2	8.2			
39	1.7	8	5.0	39	1.5	15	0.6	15	4.5	3	7.2			
40	2.6			40	0.0	16	1.7	16	4.5	4	-15.0			

## A BOARD TRANSISTOR VOLTAGE LIST

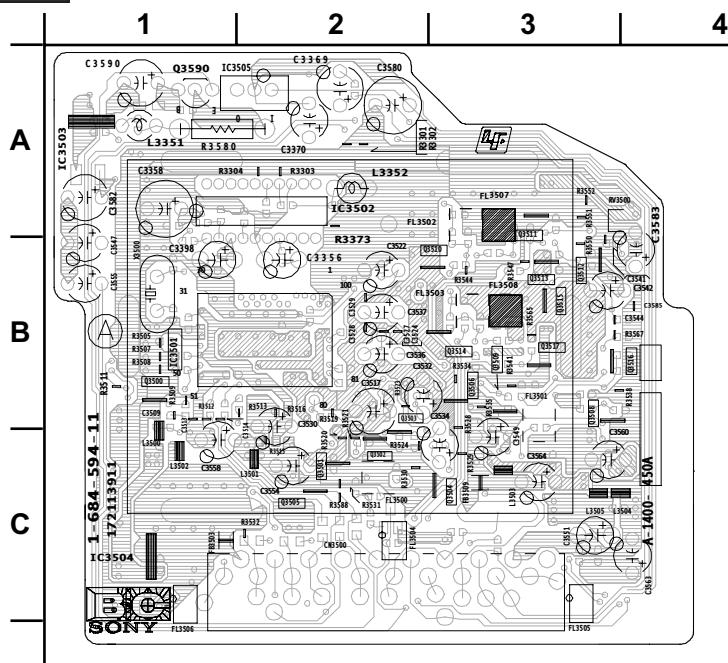
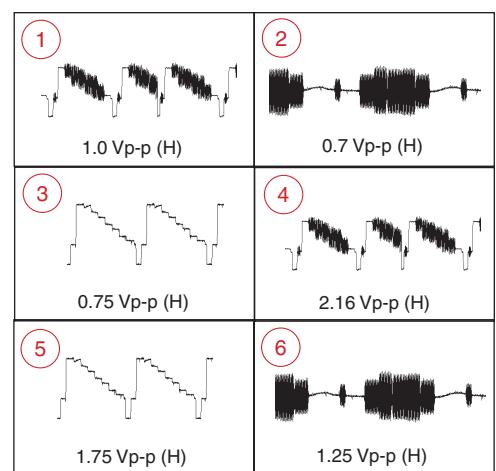
	<b>B</b>	<b>C</b>	<b>E</b>		<b>B</b>	<b>C</b>	<b>E</b>
<b>Q001</b>	0.0	0.4	5.0	<b>Q400</b>	0.0	0.0	GND
<b>Q002</b>	4.4	9.0	3.8	<b>Q401</b>	0.0	0.0	GND
<b>Q003</b>	0.7	0.0	GND	<b>Q402</b>	0.0	0.0	GND
<b>Q004</b>	0.0	4.3	GND	<b>Q403</b>	0.0	0.0	GND
<b>Q005</b>	0.1	4.9	GND	<b>Q404</b>	0.0	9.1	GND
<b>Q010</b>	4.3	GND	4.9	<b>Q405</b>	0.0	9.1	GND
<b>Q110</b>	4.8	0.0	5.0	<b>Q406</b>	0.0	9.1	GND
<b>Q300</b>	4.6	GND	5.2	<b>Q407</b>	0.7	0.0	GND
<b>Q304</b>	5.0	9.0	4.4	<b>Q501</b>	0.0	123.6	GND
<b>Q305</b>	5.0	0.0	3.4	<b>Q502</b>	0.0	131.8	0.0
<b>Q306</b>	2.0	9.0	2.3	<b>Q507</b>	0.3	110.7	GND
<b>Q307</b>	1.5	GND	2.2	<b>Q511</b>	-13.5	-8.4	-15.0
<b>Q308</b>	1.5	GND	2.2	<b>Q512</b>	-14.9	-2.0	-15.0
<b>Q309</b>	1.5	GND	2.2	<b>Q530</b>	0.0	4.4	GND
<b>Q314</b>	0.0	3.4	GND	<b>Q531</b>	4.4	0.0	4.4
<b>Q315</b>	3.4	GND	4.1	<b>Q532</b>	133.6	0.0	133.8
<b>Q316</b>	6.4	2.7	7.1	<b>Q561</b>	0.0	4.4	GND
<b>Q317</b>	0.0	3.9	GND	<b>Q562</b>	0.0	0.0	GND
<b>Q319</b>	0.6	0.6	GND	<b>Q590</b>	0.0	3.6	GND
<b>Q325</b>	2.6	6.4	1.9	<b>Q6000</b>	0.6	1.2	GND
<b>Q326</b>	2.7	GND	3.4				All voltages are in V.

## BC BOARD SCHEMATIC DIAGRAM

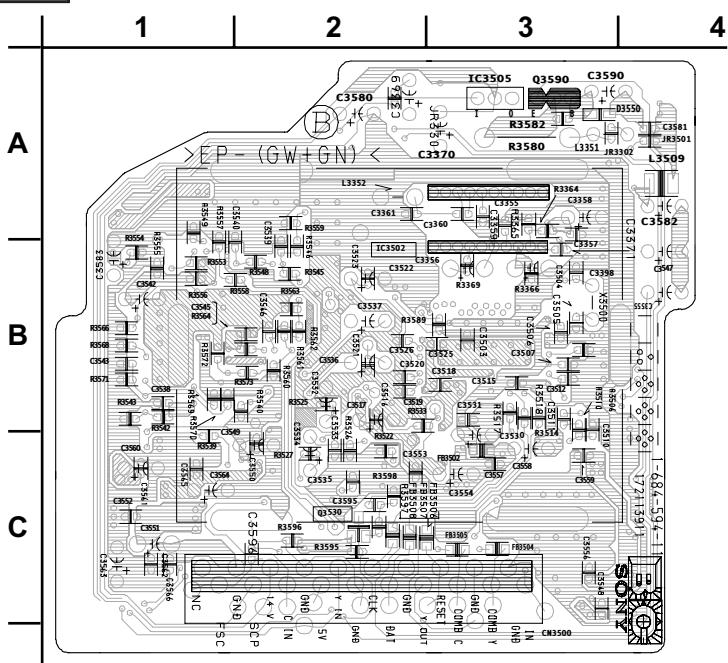


**BC**

[3D COMB FILTER, SRT, Y/C SEP] COMPONENT SIDE

**BC BOARD WAVEFORM****BC**

[3D COMB FILTER, SRT, Y/C SEP] CONDUCTOR SIDE



**BC BOARD IC VOLTAGE LIST**

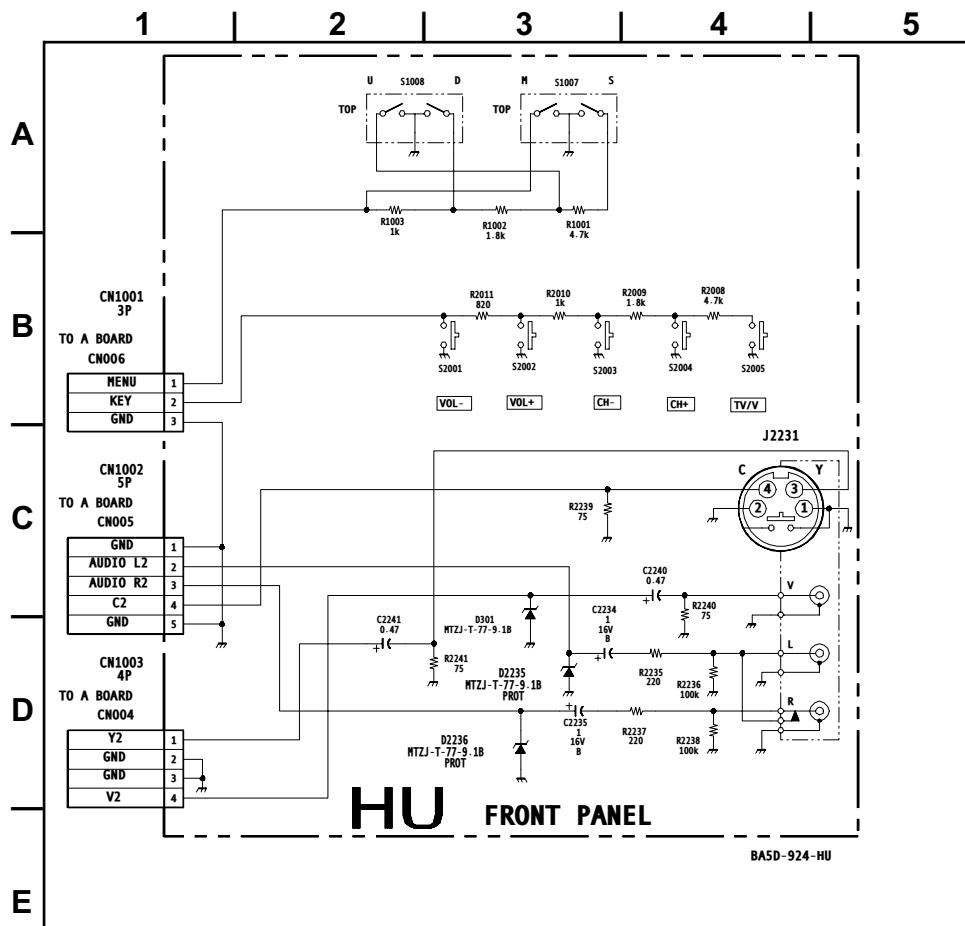
IC3501		27	N/C	55	GND	83	1.4	9	N/C
PIN	VOLT	28	N/C	56	N/C	84	1.4	10	1.2
1	GND	29	GND	57	4.8	85	1.1	11	4.7
2	GND	30	GND	58	GND	86	GND	12	4.7
3	GND	31	2.5	59	4.7	87	0.0	13	0.0
4	N/C	32	2.5	60	4.7	88	1.1	14	11.5
5	N/C	33	N/C	61	N/C	89	0.7	15	4.8
6	N/C	34	N/C	62	N/C	90	0.7	16	12.0
7	N/C	35	N/C	63	N/C	91	1.3	17	0.0
8	N/C	36	N/C	64	2.5	92	2.5	18	0.5
9	N/C	37	N/C	65	0.0	93	2.5	19	N/C
10	N/C	38	3.3	66	0.0	94	0.0	20	N/C
11	N/C	39	GND	67	N/C	95	0.0	<b>IC3503</b>	
12	N/C	40	GND	68	N/C	96	1.1	<b>PIN</b>	<b>VOLT</b>
13	N/C	41	GND	69	N/C	97	GND	I	5.0
14	N/C	42	GND	70	N/C	98	N/C	O	3.3
15	N/C	43	GND	71	N/C	99	N/C	G	GND
16	N/C	44	GND	72	N/C	100	2.5	<b>IC3504</b>	
17	N/C	45	2.5	73	N/C	<b>IC3502</b>		<b>PIN</b>	<b>VOLT</b>
18	N/C	46	2.5	74	N/C	<b>PIN</b>	<b>VOLT</b>	I	5.0
19	N/C	47	1.3	75	N/C	1	4.7	O	2.5
20	N/C	48	1.0	76	4.2	2	3.8	G	GND
21	N/C	49	GND	77	GND	3	3.9	<b>IC3505</b>	
22	N/C	50	1.4	78	GND	4	4.7	<b>PIN</b>	<b>VOLT</b>
23	N/C	51	GND	79	GND	5	GND	I	14.0
24	N/C	52	1.3	80	GND	6	N/C	O	12.0
25	N/C	53	2.5	81	2.5	7	4.8	G	GND
26	N/C	54	GND	82	1.1	8	N/C	All voltages are in V.	

**BC BOARD TRANSISTOR TABLE**

	B	C	E		B	C	E
<b>Q3500</b>	1.4	GND	2.1	<b>Q3510</b>	2.1	GND	1.4
<b>Q3501</b>	4.7	4.2	GND	<b>Q3511</b>	2.3	9.0	2.9
<b>Q3502</b>	4.7	0.5	5.0	<b>Q3512</b>	2.5	5.7	1.9
<b>Q3503</b>	3.3	4.7	3.5	<b>Q3513</b>	5.7	9.0	5.0
<b>Q3504</b>	3.3	GND	4.0	<b>Q3514</b>	1.4	GND	2.1
<b>Q3505</b>	4.3	9.0	3.7	<b>Q3515</b>	2.9	9.0	2.3
<b>Q3506</b>	6.2	9.0	5.6	<b>Q3516</b>	2.5	6.0	1.9
<b>Q3508</b>	2.4	9.0	1.8	<b>Q3517</b>	6.0	9.0	5.4
<b>Q3509</b>	1.7	GND	2.3	<b>Q3590</b>	10.2	11.3	9.0

All voltages are in V.

## HU BOARD SCHEMATIC DIAGRAM



BA5D-924-HU

**HD**

[SPACER] (KV-32FV300/36FV300 ONLY)

**HU**

[FRONT PANEL]

1

2

3

4

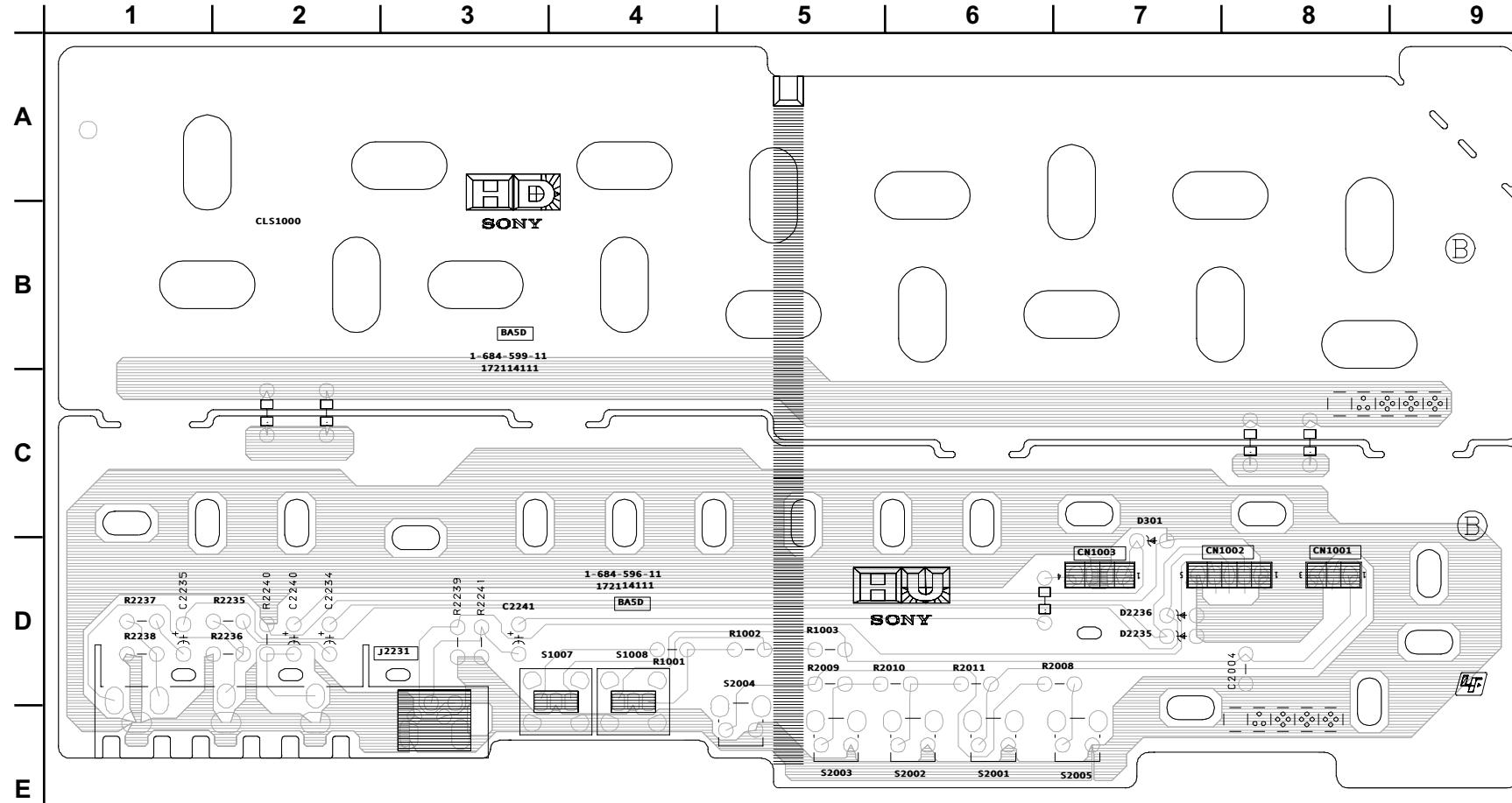
5

6

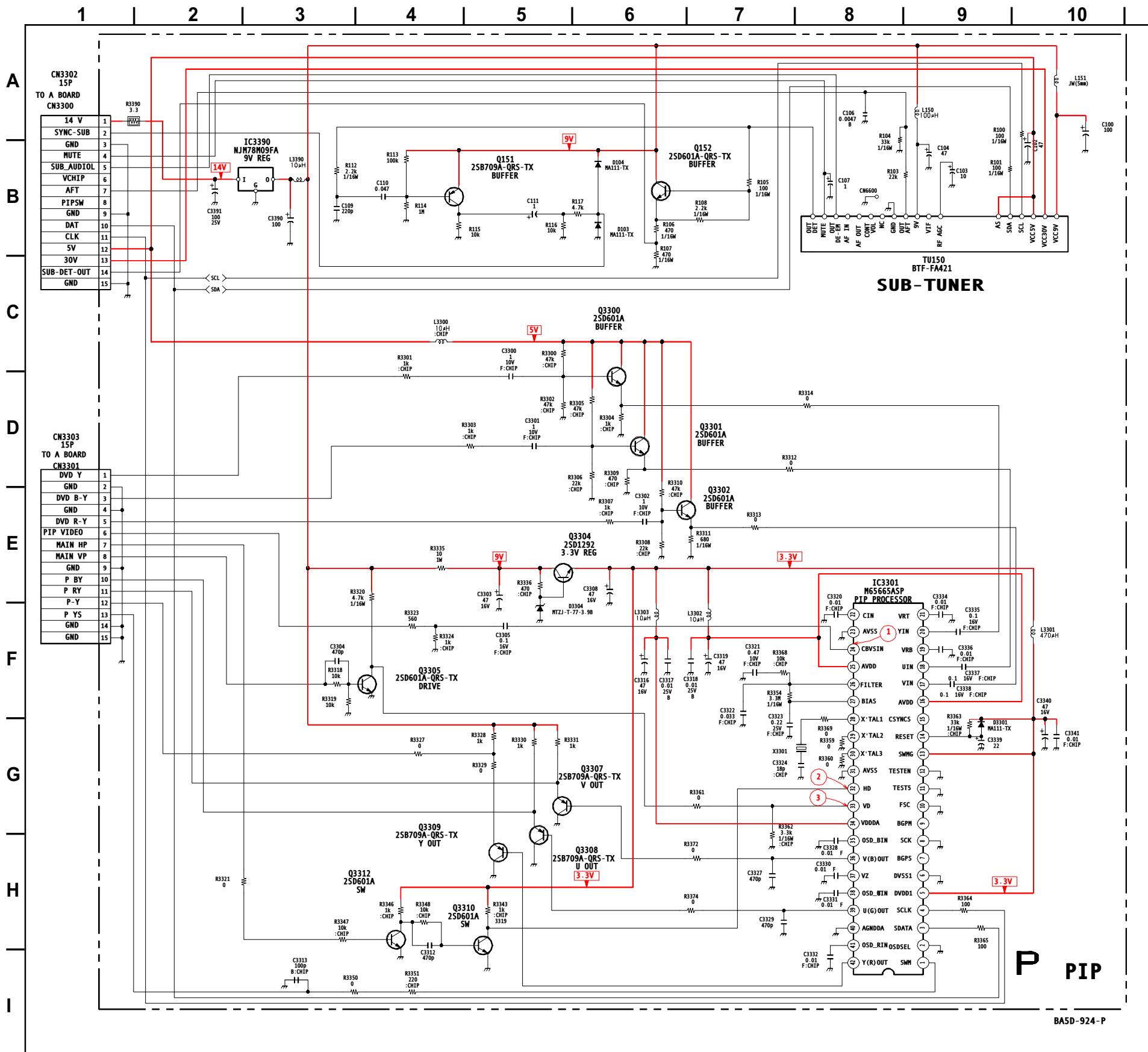
7

8

9

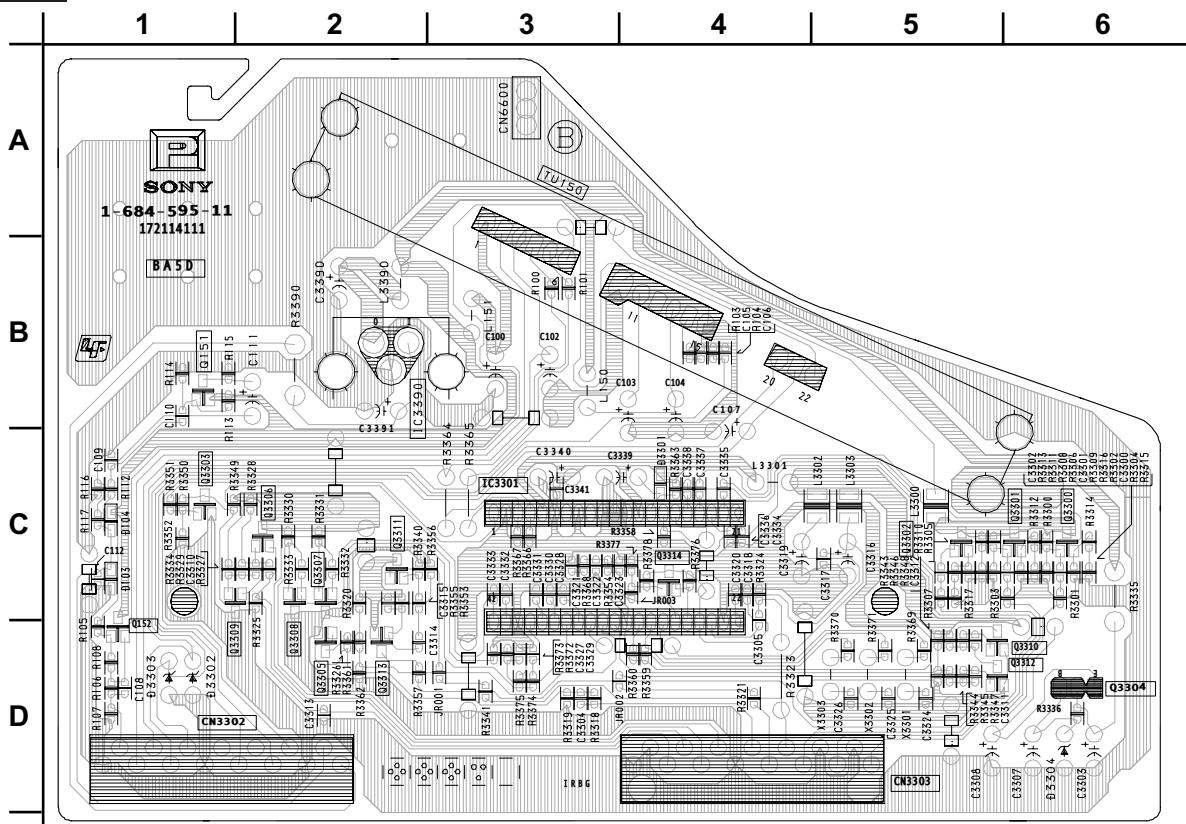


## P BOARD SCHEMATIC DIAGRAM

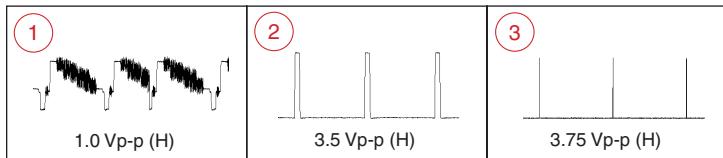


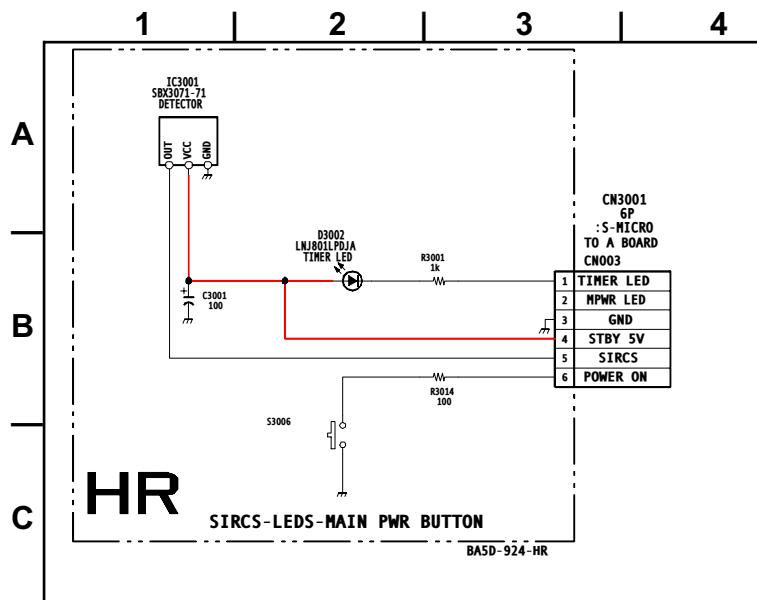
P

[PIP]



## P BOARD WAVEFORM



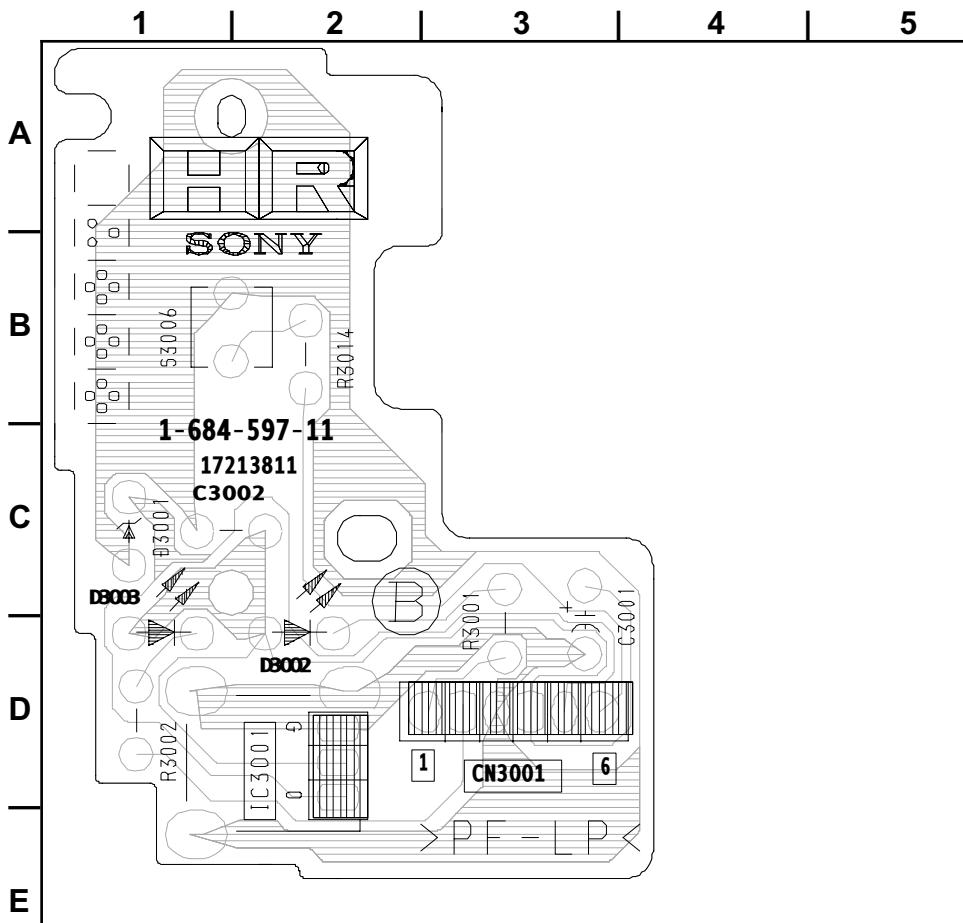
**HR BOARD SCHEMATIC DIAGRAM****HR BOARD IC VOLTAGE TABLE**

IC3001	
PIN	VOLT
I	5.0
O	5.0
G	GND

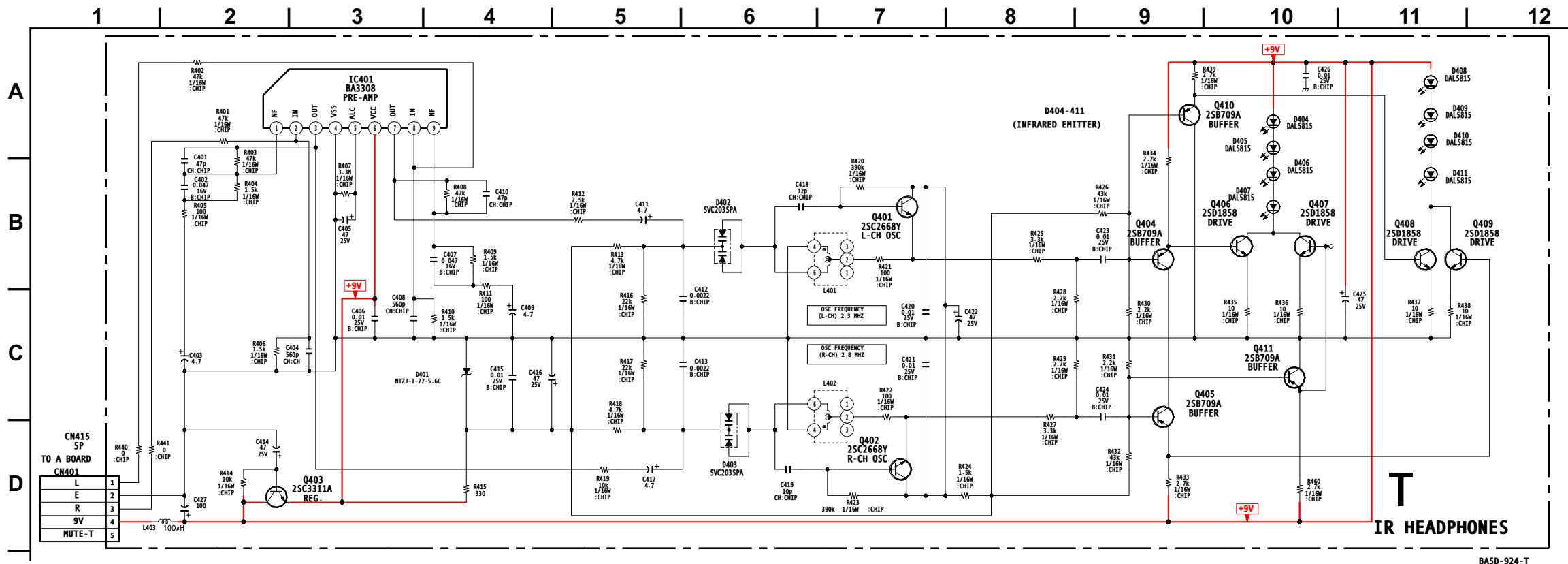
All voltages are in V.



[SIRCS, LEDS, MAIN POWER BUTTON]



## T BOARD SCHEMATIC DIAGRAM (KV-32FV300/36FV300 ONLY)



## T BOARD IC VOLTAGE TABLE

IC401	
PIN	VOLT
1	1.9
2	0.0
3	1.9
4	0.0
5	1.2
6	9.0
7	1.9
8	0.0
9	1.9

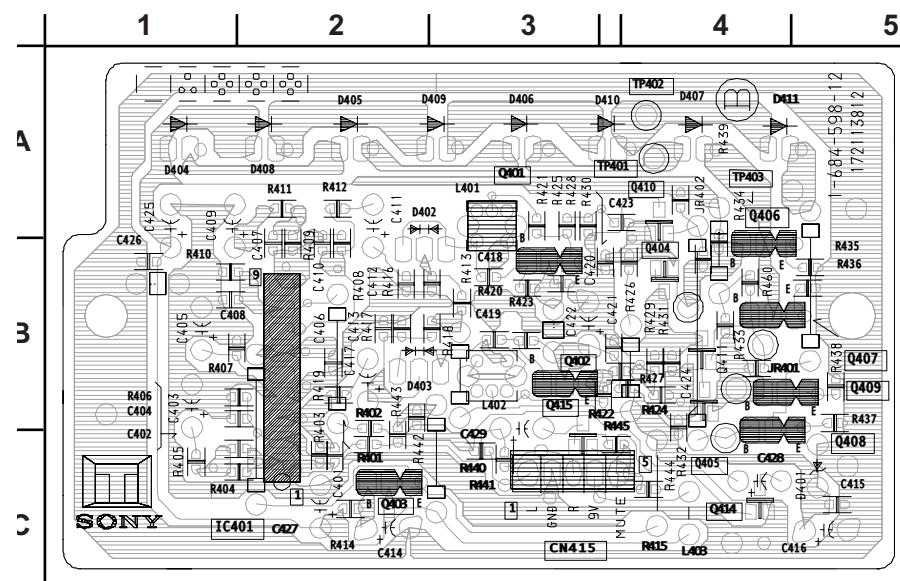
All voltages are in V.

## T BOARD TRANSISTOR TABLE

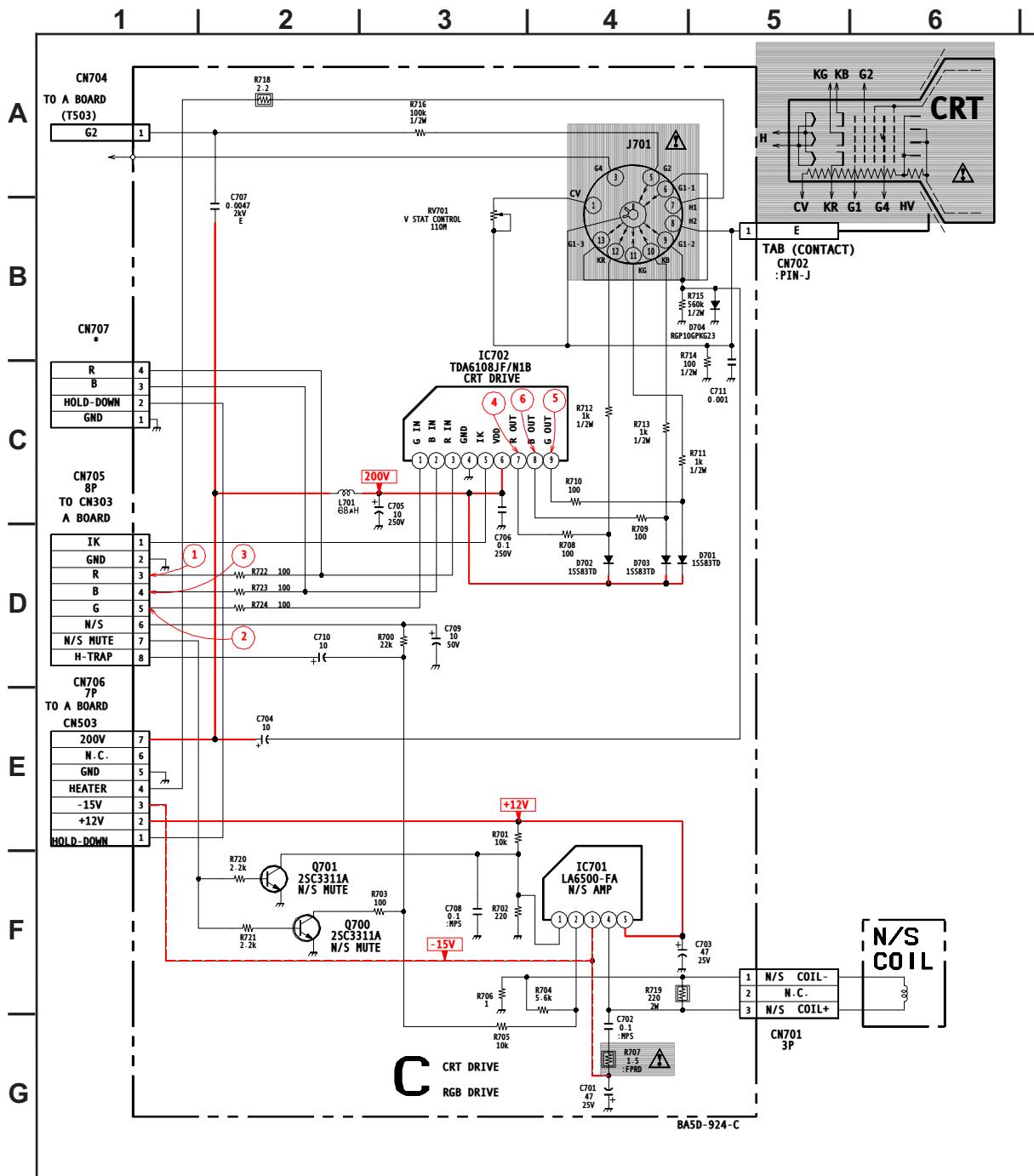
	B	C	E
Q401	0.1	3.4	0.8
Q402	0.1	3.4	0.8
Q403	8.3	9.0	9.0
Q404	1.0	0.0	0.4
Q405	1.0	0.0	0.4
Q406	1.0	2.9	0.5
Q407	1.0	2.9	0.5
Q408	1.0	2.9	0.5
Q409	1.0	2.9	0.5
Q410	1.0	0.0	0.5
Q411	1.0	0.0	0.5

All voltages are in V.

## [IR HEADPHONES] (KV-32FV300/36FV300 ONLY)

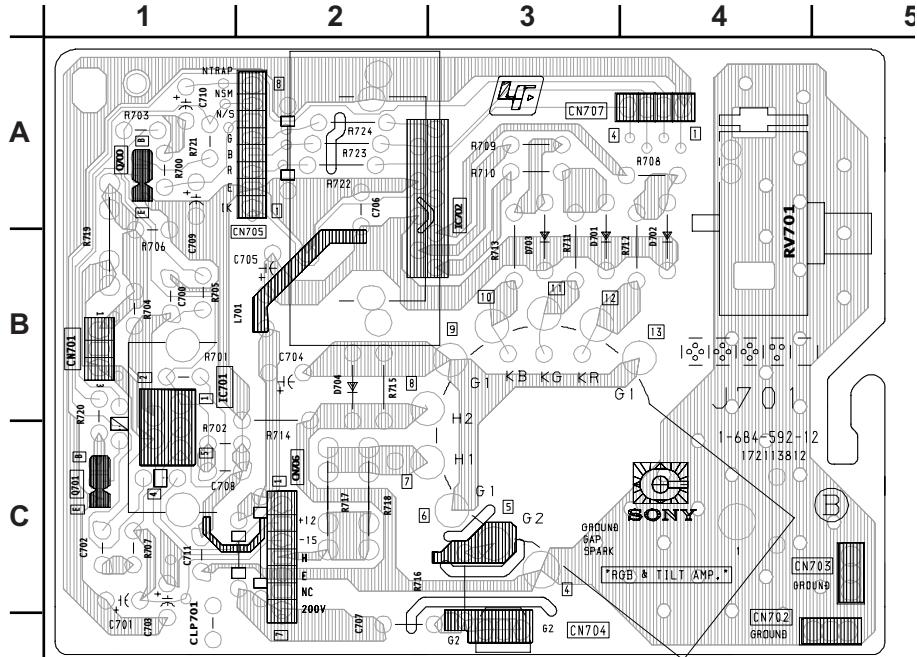


# C BOARD SCHEMATIC DIAGRAM



C

## [RGB DRIVE, CRT DRIVE]

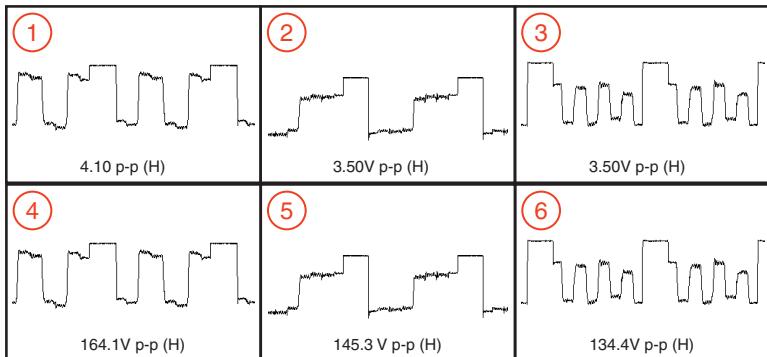


# C BOARD IC VOLTAGE TABLE

IC701	
PIN	VOLT
1	0.3
2	0.3
3	-13.0
4	0.5
5	12.0
IC702	
PIN	VOLT
1	2.2
2	2.2
3	2.2
4	GND
5	5.0
6	200.0
7	139.7
8	142.0
9	138.6

All voltages are in V.

# C BOARD WAVEFORM



## C BOARD MARK(\*) LIST

REF. NO.	LOCATION	KV-27FV300 KV-29FV300 KV-32FV300	KV-36FV300
CN707	B-1	#	4P

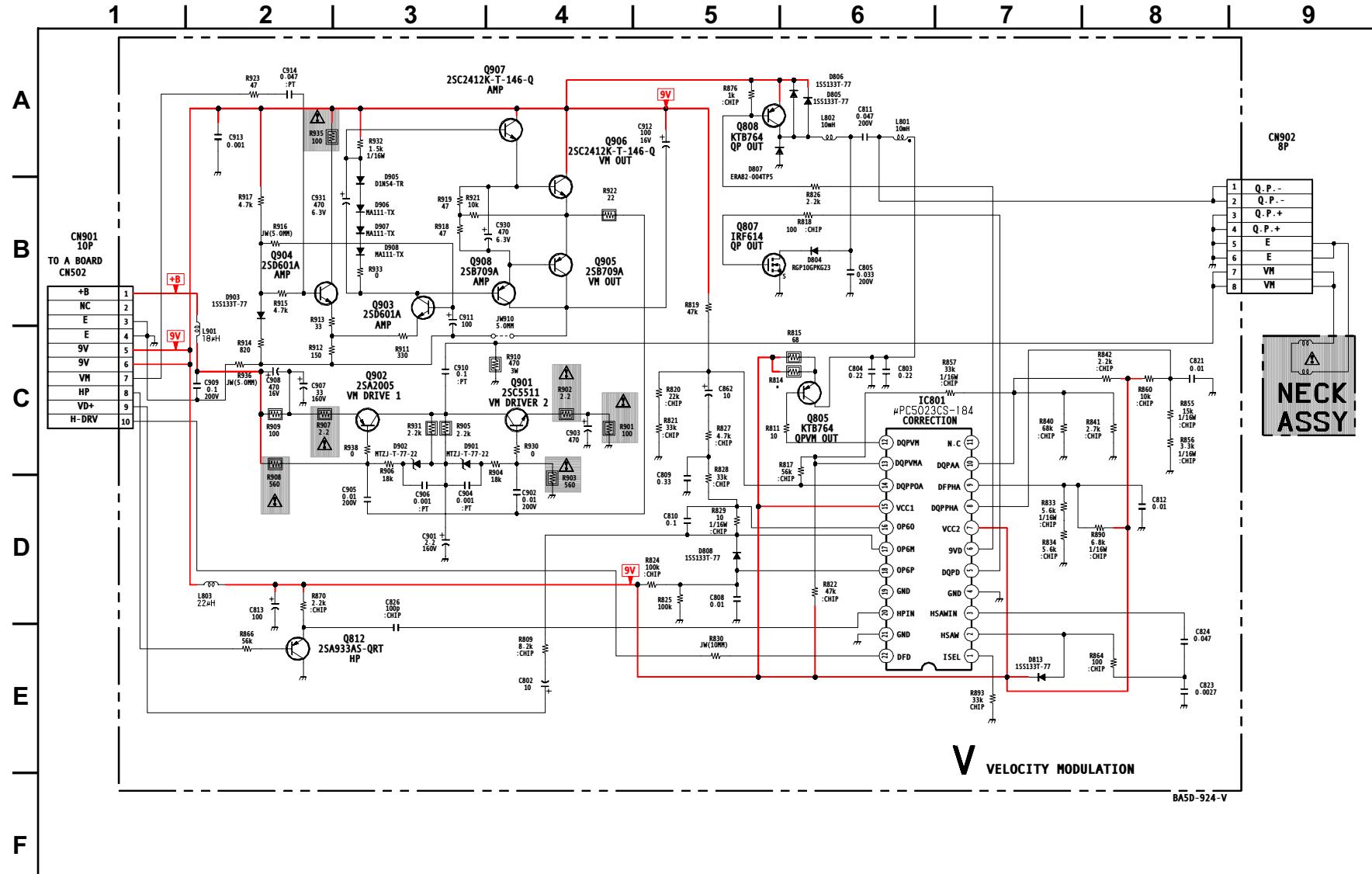
#: Not Mounted

## C BOARD TRANSISTOR TABLE

	B	C	E
Q700	0.3	0.8	GND
Q701	0.3	0.3	GND

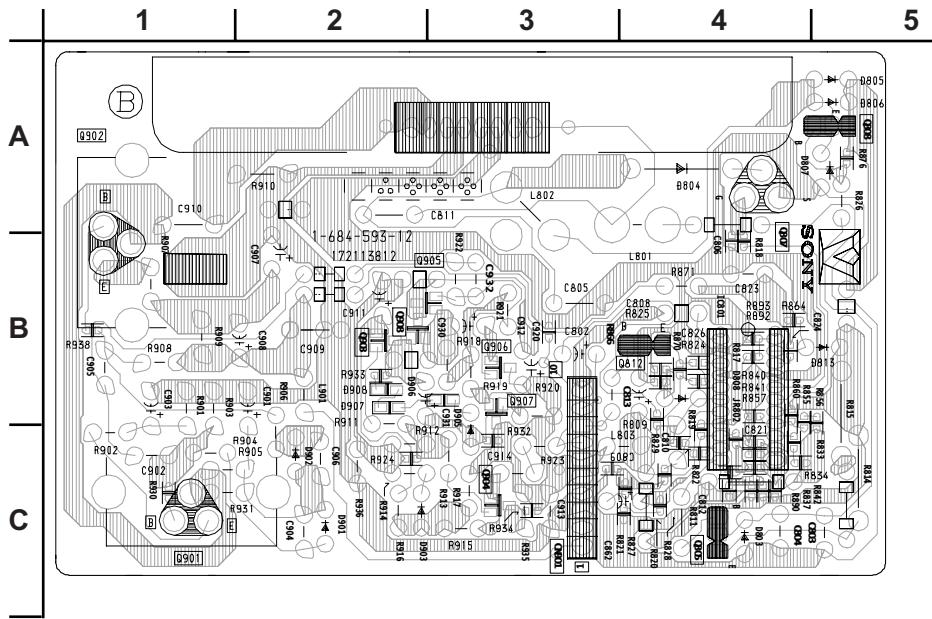
All voltages are in V.

# V BOARD SCHEMATIC DIAGRAM



V

## [VELOCITY MODULATION]



## V BOARD MARK(\*) LIST

REF. NO.	LOCATION	KV-27FV300 KV-29FV300	KV-32FV300 KV-36FV300
R814	C-6	#	68 1W

## V BOARD IC VOLTAGE LIST

IC801		11	N/C
PIN	VOLT	12	3.5
1	7.4	13	3.8
2	2.3	14	4.5
3	4.8	15	9.0
4	GND	16	4.6
5	6.3	17	4.6
6	4.5	18	4.5
7	9.0	19	N/C
8	5.8	20	4.8
9	4.6	21	GND
10	4.8	22	0.3

All voltages are in V.

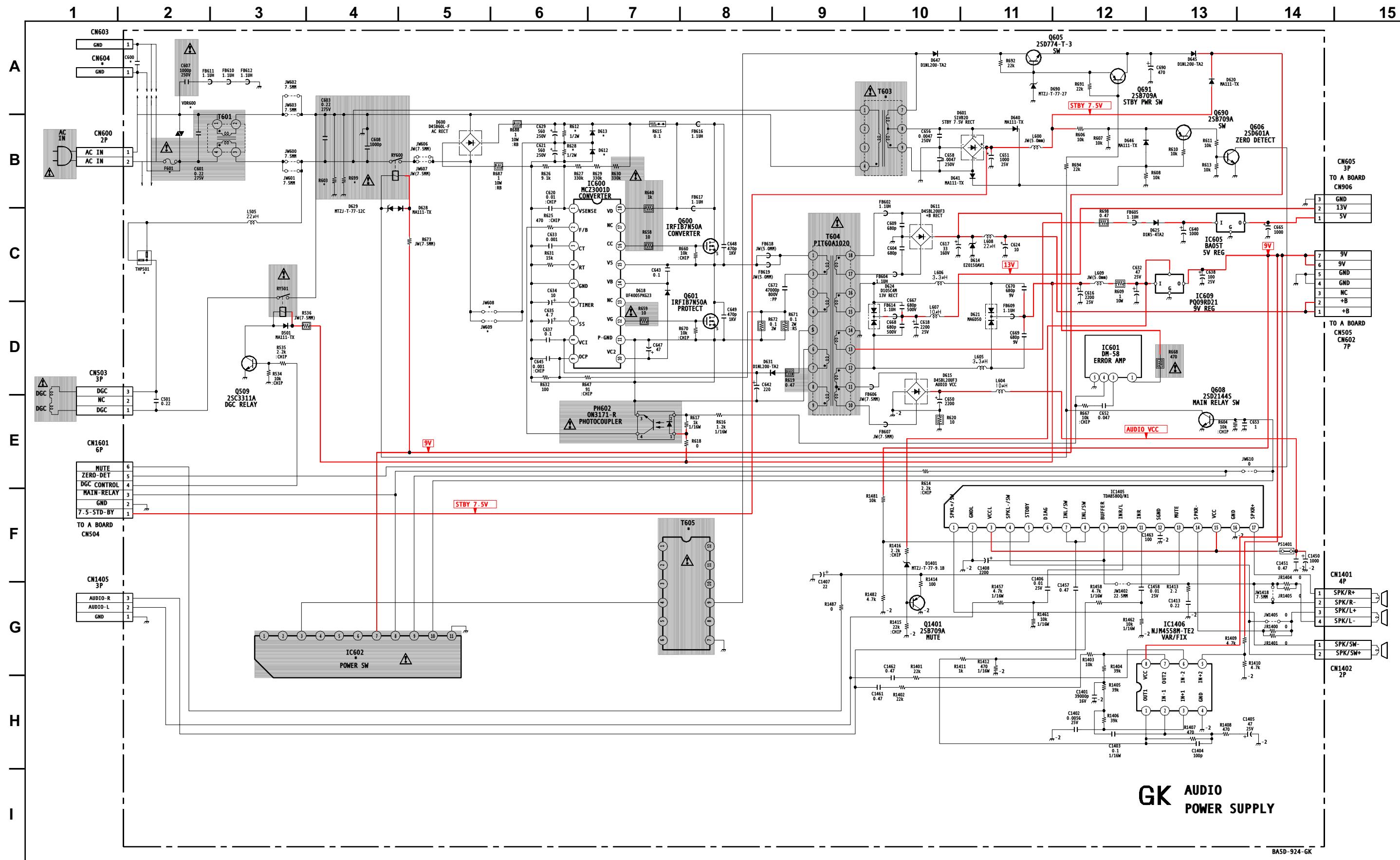
## V BOARD TRANSISTOR TABLE

	B	C	E
<b>Q805</b>	3.5	1.8	4.2
<b>Q808</b>	8.6	4.3	9.0
<b>Q812</b>	1.3	GND	2.0
<b>Q901</b>	1.4	67.0	0.8
<b>Q902</b>	132.9	67.0	133.4
<b>Q903</b>	1.2	6.2	1.8
<b>Q904</b>	1.2	8.8	1.8
<b>Q905</b>	7.1	0.0	6.7
<b>Q906</b>	7.4	9.0	7.1
<b>Q907</b>	7.4	9.0	8.1
<b>Q908</b>	6.9	0.0	6.2

All voltages are in V.

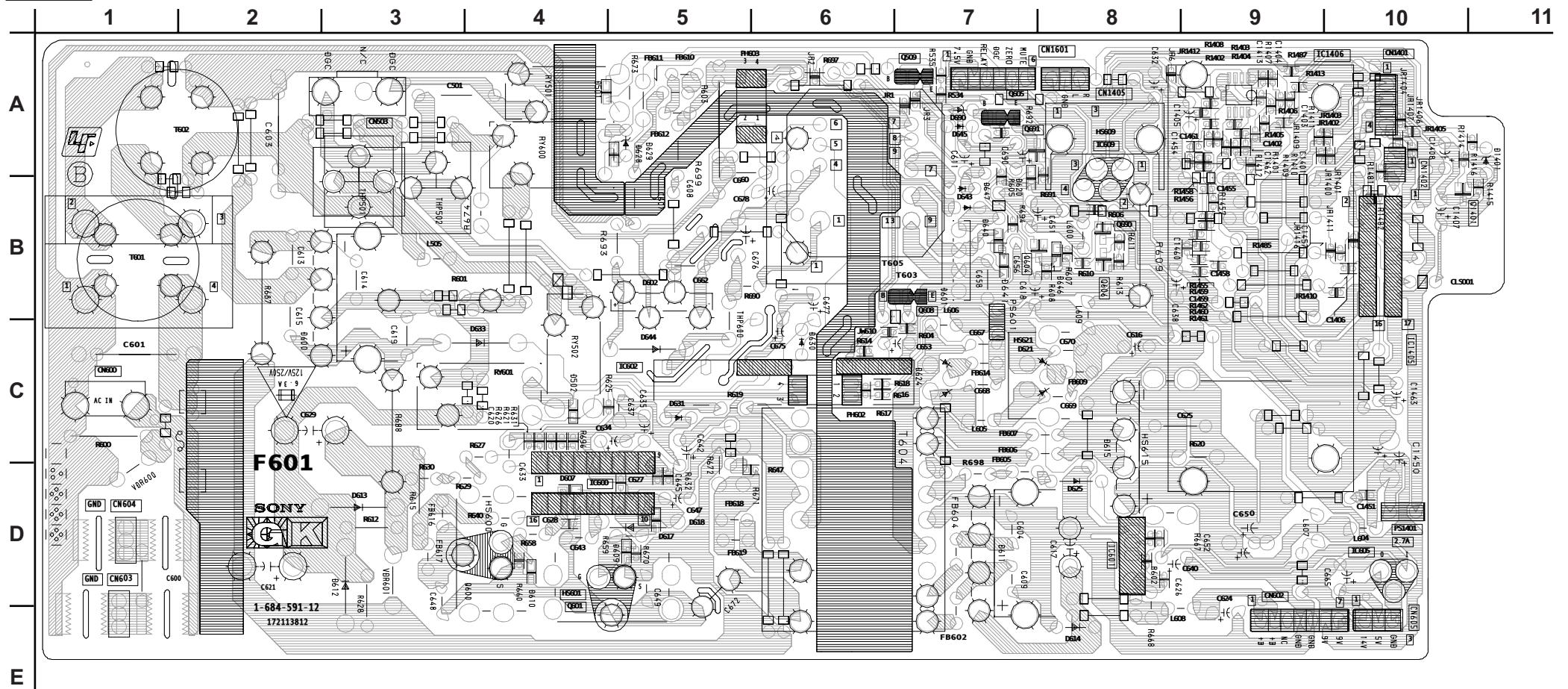
	D	G	S
Q807	9.5	6.3	GND

## GK BOARD SCHEMATIC DIAGRAM



**GK**

[POWER SUPPLY, AUDIO]

**GK BOARD LOCATOR LIST**

DIODE		IC	
D1401	A-11	IC1405	C-10
D501	A-5	IC1406	A-10
D600	C-2	IC600	D-5
D601	C-7	IC601	D-8
D611	D-7	IC602	C-5
D612	D-3	IC605	D-10
D613	D-3	IC609	A-8
D614	E-8	<b>TRANSISTOR</b>	
D615	C-8	Q1401	B-11
D618	D-5	Q509	A-7
D620	B-7	Q600	D-4
D621	C-8	Q601	E-4
D624	C-7	Q605	A-7
D625	D-8	Q606	B-8
D628	A-5	Q608	C-7
D629	A-5	Q690	B-8
D631	C-5	Q691	A-8
D640	B-7		
D641	C-7		
D645	A-7		
D646	C-8		
D647	B-7		
D690	A-7		

**GK BOARD MARK(\*) LIST**

REF. NO.	LOCATION	KV-27FV300	KV-29FV300(N)	KV-29FV300(S)	KV-36FV300
		KV-32FV300			
C600	A-1	#	0.0047UF 250V		#
CN604	A-1	1P	#		1P
D612	B-6	8-719-068-00	#		8-719-068-00
D613	B-6	8-719-068-00	#		8-719-068-00
F601	B-2	6.3A/125V	6.3A/250V		6.3A/125V
IC602	G-4	#	#		1-761-541-11
JW608	D-5	7.5MM	#		7.5MM
JW609	D-5	7.5MM	#		7.5MM
R603	B-3	4.7M 1/2W	#		4.7M 1/2W
R612	B-6	#	470K 1/2W		#
R628	B-6	#	470K 1/2W		#
R699	B-3	#	8.2M 1W		#
T603	A-9	1-437-783-11	1-437-784-11		1-437-783-11
T605	F-7	#	#		1-437-785-11
THP501	C-1	1-804-313-11	1-803-540-11		1-803-629-11
VDR600	A-2	1-803-585-11	1-803-967-11		1-803-585-11

#: Not Mounted

**GK BOARD IC VOLTAGE LIST**

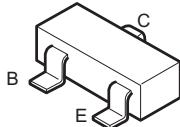
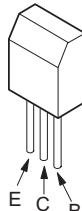
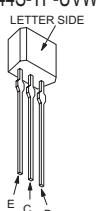
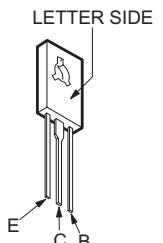
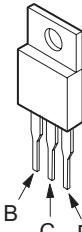
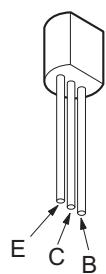
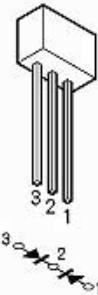
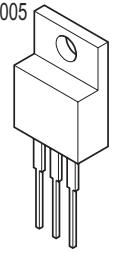
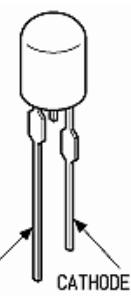
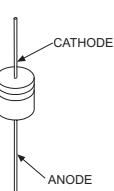
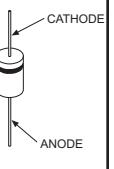
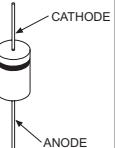
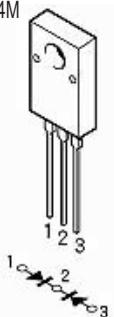
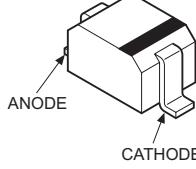
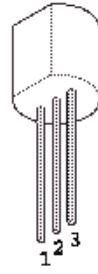
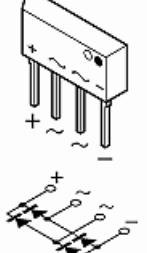
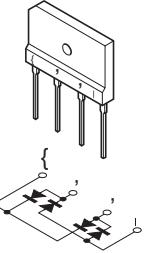
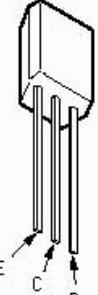
IC600		IC602		IC605		9	11.0
PIN	VOLT	PIN	VOLT	PIN	VOLT	10	4.0
1	-154.0	1	N/C	I	6.1	11	3.9
2	-155.0	2	N/C	O	5.0	12	GND
3	-154.8	3	18.5	G	GND	13	0.4
4	-154.4	4	N/C	<b>IC609</b>		14	9.9
5	-157.1	5	N/C	PIN	VOLT	15	14.0
6	-156.9	6	N/C			16	GND
7	-150.2	7	9.0	O	9.0	17	9.9
8	-138.8	8	0.0	G	GND	<b>IC1406</b>	
9	-157.1	9	0.6	<b>IC1405</b>		PIN	VOLT
10	-146.9	10	0.6	PIN	VOLT	1	4.6
11	-157.1	11	GND	1	10.1	2	4.6
12	-152.3	<b>IC601</b>		2	GND	3	4.6
13	N/C	PIN	VOLT	3	14.0	4	GND
14	7.0	1	134.6	4	10.1	5	4.6
15	-2.6	2	N/C	5	2.9	6	4.6
16	1.9	3	2.4	6	N/C	7	4.6
17	N/C	4	8.4	7	4.0	8	9.0
18	156.8	5	GND	8	4.0	All voltages are in V.	

**GK BOARD TRANSISTOR TABLE**

	B	C	E
Q509	0.3	10.5	GND
Q605	7.6	18.8	7.6
Q606	0.0	0.5	GND
Q608	0.6	0.0	GND
Q690	6.1	0.5	5.9
Q691	6.9	7.6	7.6
Q1401	0.0	GND	0.6
	D	G	S
Q600	156.9	2.5	-2.5
Q601	-2.6	-152.8	-157.4

All voltages are in V.

## 5-4. SEMICONDUCTORS

2SB709A-QRS-TX 2SD601A-QRS-TX 2SC2412K-T-146-QR 	2SC3209LK-TP 2SD774-T-34 	2SD1858-Q-TV2 2SC3311A-QRSTA 2SD2144S-TP-UVW 	2SC3840K 	2SC4159-E 
2SA1091O-TPE2 	IRF614 	SVC203SPA-AL 	IRFB7N50A-LF31 2SC5511 2SA2005 	DAL5815 
D1NS4-TA2 D1NS4-TR ERA38-06TP1 ERA82-004TP5 1SS133T-77 MTZJ-T-77-3.3B MTZJ-T-77-3.6B MTZJ-T-77-3.9B MTZJ-T-77-6.2B MTZJ-T-77-6.8B MTZJ-T-77-12C MTZJ-T-77-15B MTZJ-T-77-22 	ERC06-15S MTZJ-T-77-5.1C MTZJ-T-77-5.6C MTZJ-T-77-7.5A MTZJ-T-77-9.1B MTZJ-T-77-10B MTZJ-T-77-30D RGP10-GPKG3 RGP02-17PKG23 RGP15GPKG23 	EL1Z-V1 ERB44-06TP1 ERC04-06SE 1SS83TD 1N4003GA 1N4937/23 GP08DPKG23 PR1004GT RGP10GPKG23 RU4AM-T3 	D10SC4M 	MA111-TX UDZSTE-1710B 
2SA933AS-QRT 	S1VB20 	D4SB60L-F 	2SC2668-YTP 	MTZJ-T-77-27 

## SECTION 6: EXPLODED VIEWS

Components not identified by a part number or description are not stocked because they are seldom required for routine service.

The component parts of an assembly are indicated by the reference numbers in the far right column of the parts list and within the dotted lines of the diagram.

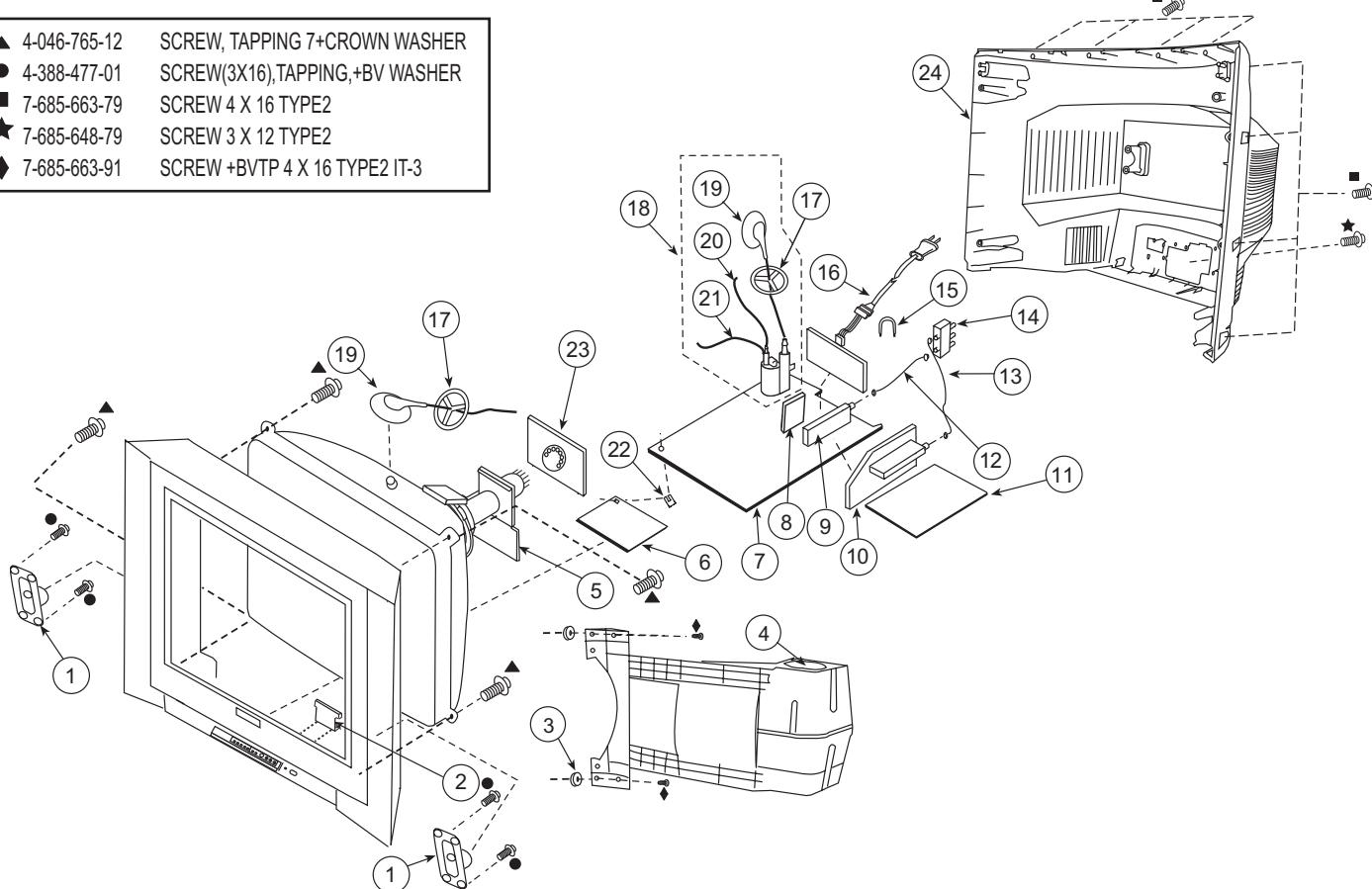
\* Items marked with an asterisk are not stocked since they are seldom required for routine service. Expect some delay when ordering these components.

**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

### 6-1. CHASSIS (KV-27FV300/29FV300 ONLY)

▲ 4-046-765-12	SCREW, TAPPING 7+CROWN WASHER
● 4-388-477-01	SCREW(3X16),TAPPING,+BV WASHER
■ 7-685-663-79	SCREW 4 X 16 TYPE2
★ 7-685-648-79	SCREW 3 X 12 TYPE2
◆ 7-685-663-91	SCREW +BVTP 4 X 16 TYPE2 IT-3



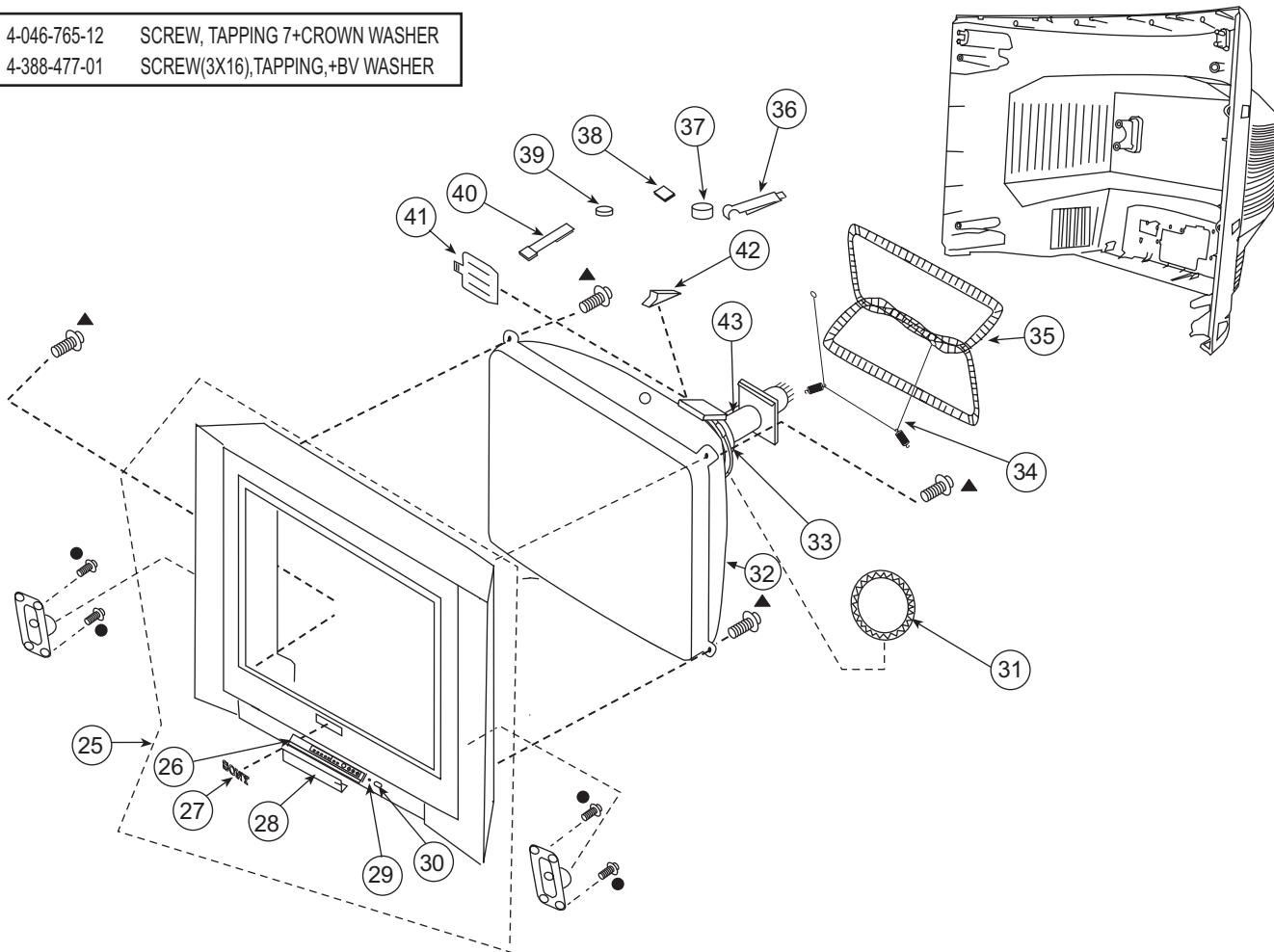
REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]	REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]
1	1-825-129-11	SPEAKER (6X12CM)		*	12	CABLE, P-P	
*	A-1400-459-A	HR (COM) MOUNTED PC BOARD		*	13	CABLE, P-P	
3	4-374-745-31	CUSHION (A)		▲ 14	1-771-787-12	SWITCH, RF ANTENNA	
4	1-825-128-11	SPEAKER (10CM)		*	15	4-076-951-01	HINGE, PWB
*	A-1400-565-A	V (VAR) MOUNTED PC BOARD		▲ 16	1-791-935-12	CORD, AC POWER(WITH CONNECTOR)	
*	A-1400-451-A	HU MOUNTED PC BOARD				KV-27FV300/29FV300 (N)	
*	A-1300-328-A	A COMPLETE PC BOARD		▲ 16	1-769-796-31	CORD, POWER (WITH CONNECTOR)	
		The high-voltage leads associated with the FBT on this board are not included and must be ordered separately (SEE 19-21).				KV-29FV300 (S)	
*	A-1400-450-A	BC MOUNTED PC BOARD		17	4-084-918-01	HOLDER, HV CABLE	
(*	9	8-598-593-00	TUNER, FSS BTF-WA421	▲ 18	1-453-310-11	FBT ASSY NX-4521//X4J4	(19-21)
*	10	A-1400-456-A	P (VAR) MOUNTED PC BOARD	▲ 19	1-251-374-13	CAP ASSY, HIGH-VOLTAGE	
*	11	A-1400-452-A	GK (VAR) MOUNTED PC BOARD	▲ 20	1-900-800-82	WIRE ASSY, FOCUS	
		KV-27FV300/29FV300 (N)	▲ 21	1-900-803-22	WIRE ASSY, G2 LEAD		
*	11	A-1400-608-A	GK (VAR) MOUNTED PC BOARD	*	22	HINGE, VI	
		KV-29FV300 (S)	*	23	A-1400-455-A	C (COM) MOUNTED PC BOARD	
			*	24	4-087-777-01	COVER, REAR	

**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specific.

## 6-2. PICTURE TUBE (KV-27FV300/29FV300 ONLY)

- ▲ 4-046-765-12 SCREW, TAPPING 7+CROWN WASHER
- 4-388-477-01 SCREW(3X16),TAPPING,+BV WASHER



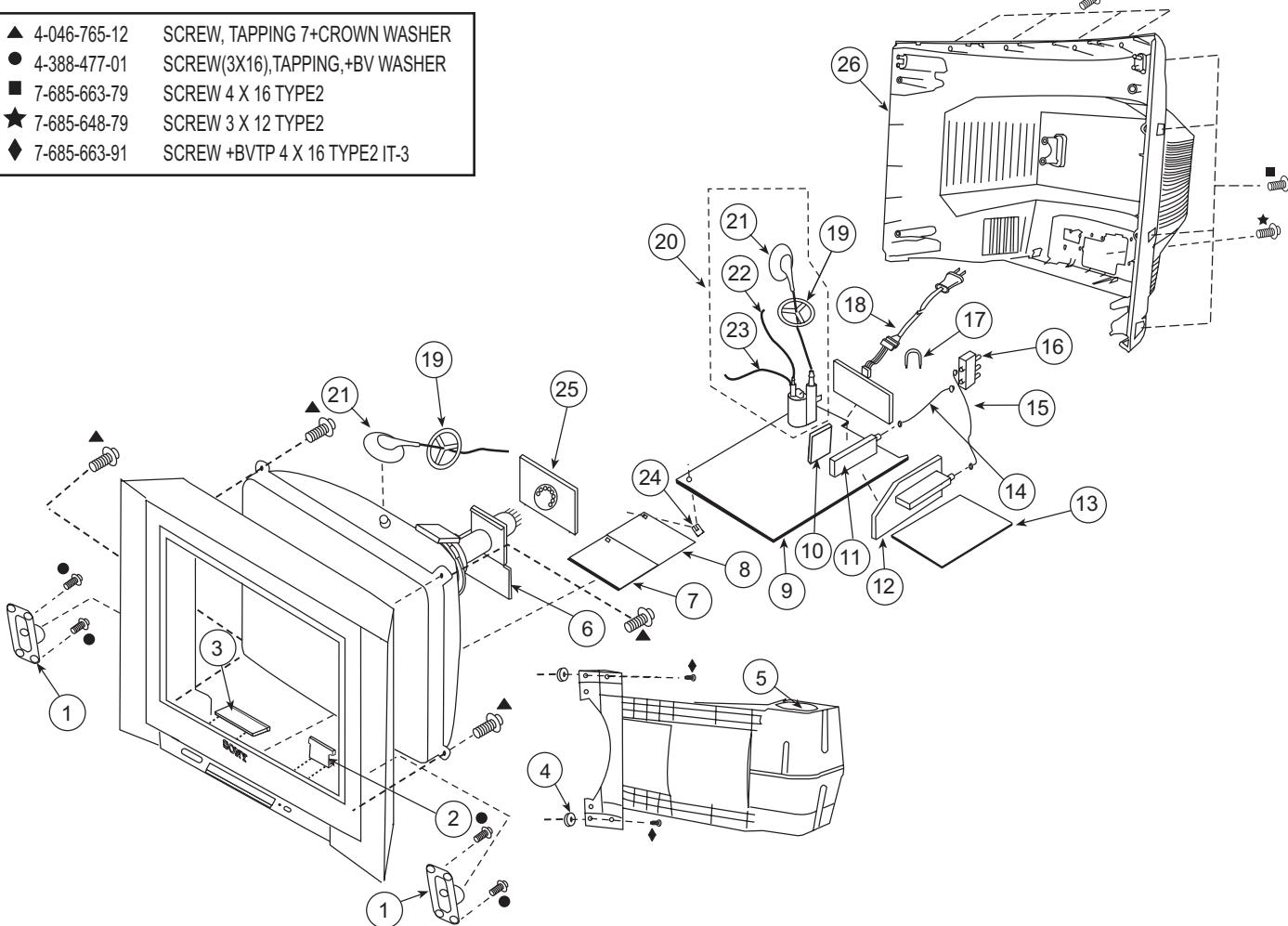
REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]	REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]
25	X-4040-177-1	BEZNET ASSY	(26-30)	▲ 35	1-419-156-21	COIL, DEGAUSSING	
26	4-087-374-01	SPRING, DOOR		▲ 35	1-419-523-21	KV-27FV300/29FV300 (N)	KV-29FV300 (S)
27	4-046-160-21	EMBLEM, SONY (NO.9)		* 36	4-062-970-12	COIL, DEGAUSSING	
28	4-087-375-11	DOOR, CONTROL		37	1-452-094-00	CLIP (29RSN), DGC	CIRCULAR DISC MAGNET B
29	4-087-156-01	GUIDE, LIGHT		38	1-452-885-11	MAGNET, LANDING	MAGNET, DISC
30	4-087-150-01	BUTTON, POWER		39	1-452-032-00	MAGNET, DISC	
▲ 31	1-452-896-11	COIL, NA ROTATION (RT200)		40	4-083-414-01	PIECE A(110), CONV CORRECT	
▲ 32	8-735-082-05	CRT 29RSN(SDP)	KV-27FV300/29FV300 (N)	41	4-081-170-01	PLATE, TLH CORRECTION	
▲ 32	8-735-083-05	CRT 29RSN(SDP)(SOUTH)	KV-29FV300 (S)	42	4-053-005-01	SPACER, DY	
▲ 33	8-451-494-41	DY Y29RSA-V		▲ 43	8-453-011-11	NECK ASSEMBLY NA299-M	
34	4-036-329-01	SPRING (B), TENSION					

**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specific.

### 6-3. CHASSIS (KV-32FV300 ONLY)

▲ 4-046-765-12	SCREW, TAPPING 7+CROWN WASHER
● 4-388-477-01	SCREW(3X16),TAPPING,+BV WASHER
■ 7-685-663-79	SCREW 4 X 16 TYPE2
★ 7-685-648-79	SCREW 3 X 12 TYPE2
◆ 7-685-663-91	SCREW +BVTP 4 X 16 TYPE2 IT-3



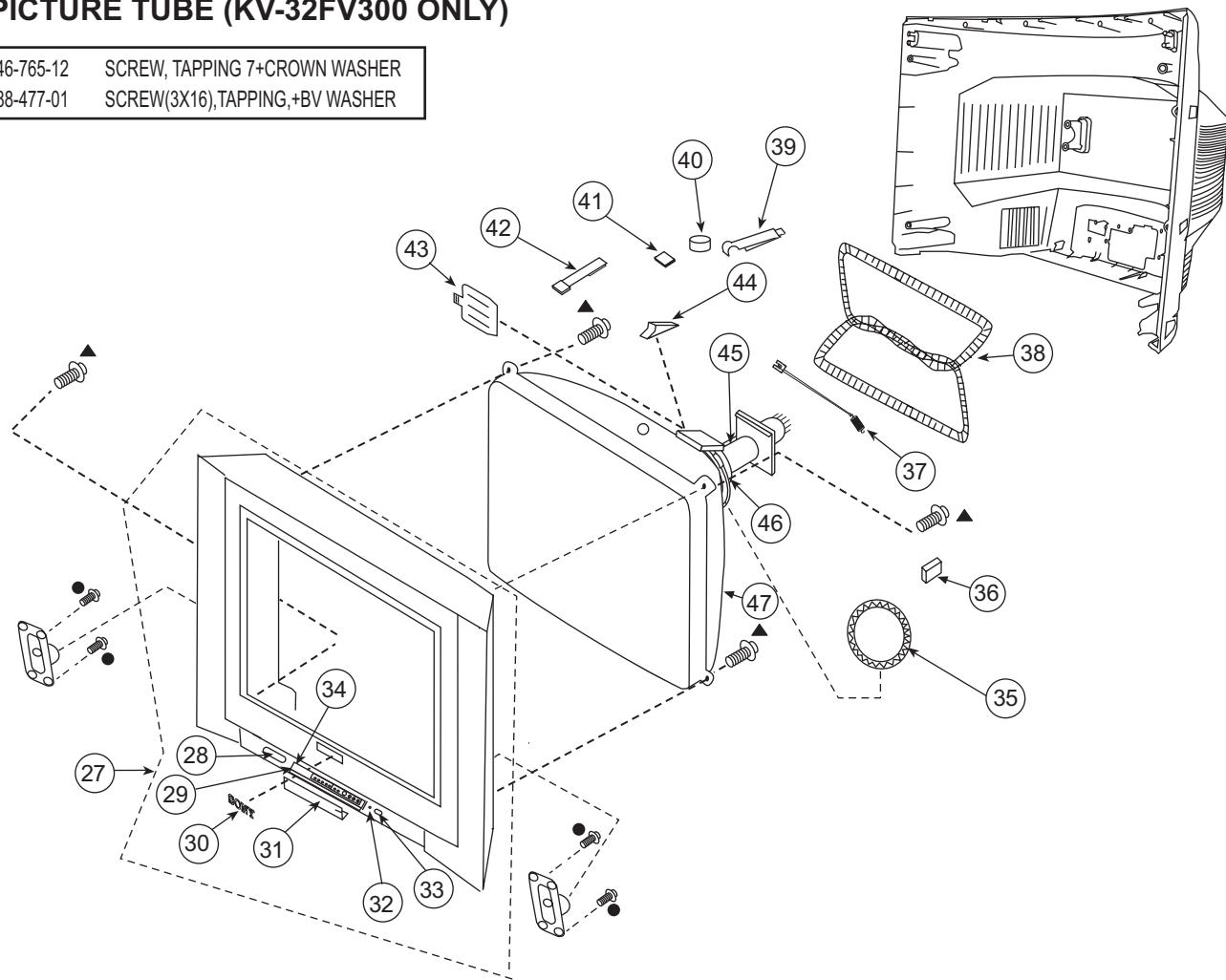
REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]	REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]
1	1-825-129-11	SPEAKER (6X12CM)		*	13	A-1400-452-A	GK (VAR) MOUNTED PC BOARD
*	A-1400-459-A	HR (COM) MOUNTED PC BOARD		*	14	1-555-110-00	CABLE, P-P
*	A-1400-460-A	T MOUNTED PC BOARD		*	15	1-558-539-21	CABLE, P-P
4	4-374-745-31	CUSHION (A)		▲ 16	1-771-787-12	SWITCH, RF ANTENNA	
5	1-825-128-11	SPEAKER (10CM)		*	17	4-076-951-01	HINGE, PWB
*	A-1400-461-A	V (VAR) MOUNTED PC BOARD		▲ 18	1-791-935-12	CORD, AC POWER(WITH CONNECTOR)	
*	A-1400-451-A	HU MOUNTED PC BOARD		19	4-084-918-01	HOLDER, HV CABLE	
*	A-1400-607-A	HD MOUNTED PC BOARD		▲ 20	1-453-338-31	FBT ASSY NX-4600//X4C4	(21-23)
*	A-1300-278-A	A COMPLETE PC BOARD		▲ 21	1-251-715-22	CAP ASSY, HIGH-VOLTAGE	
		The high-voltage leads associated with the FBT on this board are not included and must be ordered separately (SEE 21-23).		▲ 22	1-900-805-19	WIRE ASSY, FOCUS HV	
*	10	BC MOUNTED PC BOARD		▲ 23	1-900-805-22	CONNECTOR ASSY, G2 HV	
11	8-598-593-00	TUNER, FSS BTF-WA421		*	24	3-696-606-02	HINGE, VI
*	12	P (VAR) MOUNTED PC BOARD		*	25	A-1400-455-A	C (COM) MOUNTED PC BOARD
				*	26	4-087-878-01	COVER, REAR

**NOTE:** The components identified by shading and  mark are critical for safety.  
Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

## 6-4. PICTURE TUBE (KV-32FV300 ONLY)

- ▲ 4-046-765-12 SCREW, TAPPING 7+CROWN WASHER
- 4-388-477-01 SCREW(3X16),TAPPING,+BV WASHER



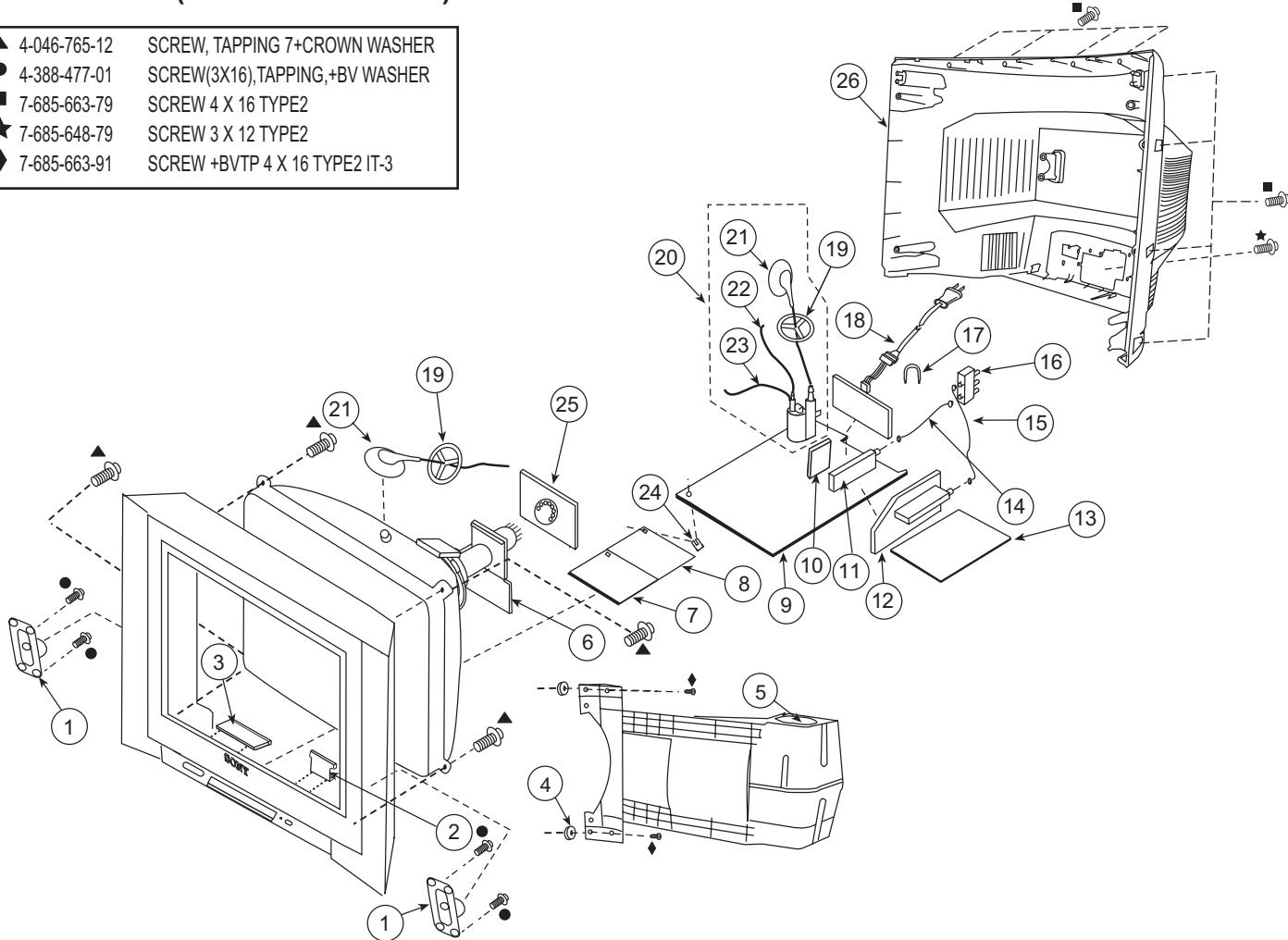
REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]	REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]
27	X-4040-115-1	BEZNET ASSY	(28-34)	▲ 38	1-428-988-11	DEGAUSSING COIL (32" 120V)	
28	4-086-887-01	PANEL, IR		39	4-065-895-11	HOLDER, DGC	
29	4-087-374-01	SPRING, DOOR		40	1-452-032-00	MAGNET,DISC	
30	4-046-160-21	EMBLEM, SONY (NO.9)		41	1-452-885-11	MAGNET, LANDING	
31	4-087-375-11	DOOR, CONTROL		42	4-083-414-01	PIECE A(110), CONV CORRECT	
32	4-087-156-01	GUIDE, LIGHT		43	4-081-170-01	PLATE, TLH CORRECTION	
33	4-087-150-01	BUTTON, POWER		44	4-053-005-01	SPACER, DY	
34	4-036-880-11	DAMPER		▲ 45	8-453-007-41	NECK ASSEMBLY NA324-M4	
▲ 35	1-452-896-11	COIL, NA ROTATION (RT200)		▲ 46	8-451-499-41	DY Y34RSA-V	
* 36	4-078-952-01	CUSHION, 20MM X 20MM		▲ 47	8-735-066-05	CRT 34RSN(SDP)	
37	4-082-641-01	SPRING 45MM					

**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specific.

## 6-5. CHASSIS (KV-36FV300 ONLY)

- |                |                                |
|----------------|--------------------------------|
| ▲ 4-046-765-12 | SCREW, TAPPING 7+CROWN WASHER  |
| ● 4-388-477-01 | SCREW(3X16),TAPPING,+BV WASHER |
| ■ 7-685-663-79 | SCREW 4 X 16 TYPE2             |
| ★ 7-685-648-79 | SCREW 3 X 12 TYPE2             |
| ◆ 7-685-663-91 | SCREW +BVTP 4 X 16 TYPE2 IT-3  |



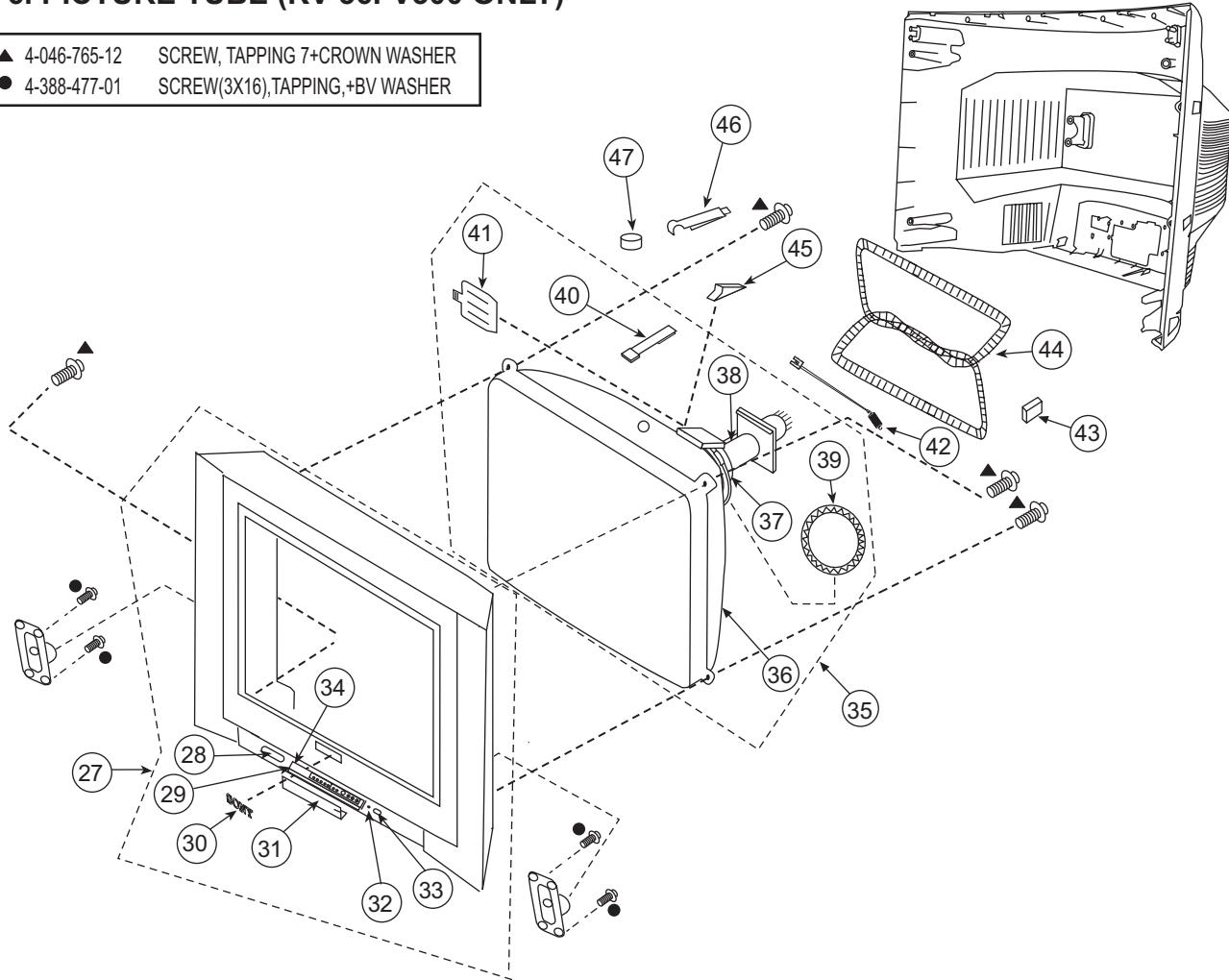
REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]	REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]
1	1-825-129-11	SPEAKER (6X12CM)		*	13	A-1400-583-A	GK (VAR) MOUNTED PC BOARD
*	2	A-1400-459-A	HR (COM) MOUNTED PC BOARD	*	14	1-555-110-00	CABLE, P-P
*	3	A-1400-460-A	T MOUNTED PC BOARD	*	15	1-558-539-21	CABLE, P-P
4	4-374-745-31	CUSHION (A)		△	16	1-771-787-12	SWITCH, RF ANTENNA
5	1-825-128-11	SPEAKER (10CM)		*	17	4-076-951-01	HINGE, PWB
*	6	A-1400-581-A	V (VAR) MOUNTED PC BOARD	△	18	1-791-935-12	CORD, AC POWER(WITH CONNECTOR)
*	7	A-1400-451-A	HU MOUNTED PC BOARD	*	19	3-704-372-71	HOLDER, HV CABLE
*	8	A-1400-607-A	HD MOUNTED PC BOARD	△	20	1-453-338-21	FBT ASSY NX-4600//X4C4
*	9	A-1300-336-A	A COMPLETE PC BOARD	△	21	1-251-715-32	(21-23) CAP ASSY, HIGH-VOLTAGE
		The high-voltage leads associated with the FBT on this board are not included and must be ordered separately (SEE 21-23).		△	22	1-900-805-19	WIRE ASSY, FOCUS HV
*	10	A-1400-450-A	BC MOUNTED PC BOARD	△	23	1-900-805-22	CONNECTOR ASSY, G2 HV
(2)	11	8-598-593-00	TUNER, FSS BTF-WA421	*	24	3-696-606-02	HINGE, VI
*	12	A-1400-456-A	P (VAR) MOUNTED PC BOARD	*	25	A-1400-580-A	C (VAR) MOUNTED PC BOARD
				*	26	4-086-697-01	COVER, REAR

**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

## 6-6. PICTURE TUBE (KV-36FV300 ONLY)

- |                |                                |
|----------------|--------------------------------|
| ▲ 4-046-765-12 | SCREW, TAPPING 7+CROWN WASHER  |
| ● 4-388-477-01 | SCREW(3X16),TAPPING,+BV WASHER |



REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]	REF. NO.	PART NO.	DESCRIPTION	[Assembly Includes]
27	X-4039-673-1	BEZNET ASSY	(27-34)	▲ 37	1-451-531-11	DY	
28	4-086-887-01	PANEL, IR		▲ 37	8-451-506-11	KV-36FV300 (U) (CND)	
29	4-087-374-01	SPRING, DOOR		▲ 38	8-453-007-41	DY Y38RSA-X	
30	4-046-160-21	EMBLEM, SONY (NO.9)		▲ 39	1-452-896-11	KV-36FV300 (HAWAII)	
31	4-087-375-11	DOOR, CONTROL		40	4-062-047-02	NECK ASSEMBLY, NA324-M4	
32	4-087-156-01	GUIDE, LIGHT		41	4-081-170-01	COIL, NA ROTATION (RT200)	
33	4-087-150-01	BUTTON, POWER		42	4-082-641-01	PIECE A(110), CONV CORRECT	
34	4-036-880-11	DAMPER		* 43	4-078-952-01	PLATE, TLH CORRECTION	
▲ 35	8-735-048-61	ITC 38RSN-A1	(36-41)	44	1-428-987-11	SPRING, 45MM	
		KV-36FV300 (U) (CND)		45	4-078-952-01	CUSHION, 20MM X 20MM	
▲ 35	8-735-081-61	ITC 38RSN-A1M	(36-41)	46	1-428-987-11	DEGAUSSING COIL (36" 120V)	
		KV-36FV300 (HAWAII)		47	4-053-005-01	HOLDER, DGC	
▲ 36	8-735-045-05	CRT 38RSN/F73504801			4-065-895-11	SPACER, DY	
		KV-36FV300 (U) (CND)				MAGNET,DISC	
▲ 36	8-735-081-05	CRT 38RSN					
		KV-36FV300 (HAWAII)					

## SECTION 7: ELECTRICAL PARTS LIST

**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

The components in this manual identified by the following symbol:  indicate parts that have been carefully factory-selected to satisfy regulations regarding X-ray radiation For each set.

Should replacement be required for one of these components, replace only with the value originally used.

**A**

### RESISTORS

- All resistors are in ohms
- F : nonflammable
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When ordering parts by reference number, please include the board name.

REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES					
			C006	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V	C007	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
			C008	1-126-960-11	ELECT	1µF	20%	50V	C009	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
			C014	1-162-919-11	CERAMIC CHIP	22pF	5%	50V	C015	1-162-919-11	CERAMIC CHIP	22pF	5%	50V
*	A-1300-278-A	A BOARD, COMPLETE (KV-32FV300 ONLY)	C016	1-126-941-11	ELECT	470µF	20%	25V	C017	1-162-966-11	CERAMIC CHIP	0.0022µF	10%	50V
*	A-1300-328-A	A BOARD, COMPLETE (KV-27FV300/29FV300 ONLY)	C018	1-164-230-11	CERAMIC CHIP	220pF	5%	50V	C020	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
*	A-1300-336-A	A BOARD, COMPLETE (KV-36FV300 ONLY)	C026	1-164-230-11	CERAMIC CHIP	220pF	5%	50V	C027	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
	4-382-854-11	SCREW (M3X10), P, SW (+)	C028	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V	C029	1-126-960-11	ELECT	1µF	20%	50V
		The high-voltage leads associated with the FBT on the A board are not included and must be ordered separately. Order the following leads when requesting this A board:	C030	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V	C031	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
	1-251-374-13	HV CAP ASSY	C032	1-126-964-11	ELECT	10µF	20%	50V	C033	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V
	1-900-800-82	FOCUS LEAD	C034	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V	C035	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
	1-900-803-22	G2 LEAD	C036	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V	C037	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
		(KV-27FV300/29FV300 ONLY)	C038	1-164-230-11	CERAMIC CHIP	220pF	5%	50V	C039	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V
	1-251-715-22	HV CAP ASSY	C041	1-164-230-11	CERAMIC CHIP	220pF	5%	50V	C043	1-164-230-11	CERAMIC CHIP	220pF	5%	50V
	1-900-805-19	FOCUS LEAD	C044	1-164-230-11	CERAMIC CHIP	220pF	5%	50V	C045	1-126-964-11	ELECT	10µF	20%	50V
	1-900-805-22	G2 LEAD	C046	1-126-964-11	ELECT	10µF	20%	50V	C047	1-126-941-11	ELECT	470µF	20%	25V
		(KV-32FV300 ONLY)	C048	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V	C049	1-126-964-11	ELECT	10µF	20%	50V
		<b>CAPACITOR</b>	C050	1-126-941-11	ELECT	470µF	20%	25V	C051	1-126-947-11	ELECT	47µF	20%	25V
C001	1-164-315-11	CERAMIC CHIP	C052	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V						
C002	1-164-230-11	CERAMIC CHIP												
C003	1-107-826-11	CERAMIC CHIP												
C004	1-126-947-11	ELECT												
C005	1-164-739-11	CERAMIC CHIP												

REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C054	1-126-963-11	ELECT	4.7µF	20%	50V	C340	1-126-767-11	ELECT	1000µF	20%	16V
C055	1-126-933-11	ELECT	100µF	20%	16V	C341	1-126-947-11	ELECT	47µF	20%	25V
C060	1-164-230-11	CERAMIC CHIP	220pF	5%	50V	C343	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C062	1-125-837-91	CERAMIC CHIP	1µF	10%	6.3V	C344	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C065	1-125-891-11	CERAMIC CHIP	0.47µF	10%	10V	C345	1-113-619-11	CERAMIC CHIP	0.47µF		10V
C101	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V	C346	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C102	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V	C347	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C111	1-164-230-11	CERAMIC CHIP	220pF	5%	50V	C351	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C120	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V	C352	1-126-947-11	ELECT	47µF	20%	25V
C121	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V	C353	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C122	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C354	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C133	1-164-230-11	CERAMIC CHIP	220pF	5%	50V	C355	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C200	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C356	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C201	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C357	1-126-960-11	ELECT	1µF	20%	50V
C202	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C358	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C203	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C359	1-162-961-11	CERAMIC CHIP	330pF	10%	50V
C206	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C360	1-126-960-11	ELECT	1µF	20%	50V
C207	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C364	1-162-923-11	CERAMIC CHIP	47pF	5%	50V
C208	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C365	1-162-117-00	CERAMIC	100pF	10%	500V
C209	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C366	1-113-619-11	CERAMIC CHIP	0.47µF		10V
C210	1-126-963-11	ELECT	4.7µF	20%	50V	C367	1-113-619-11	CERAMIC CHIP	0.47µF		10V
C211	1-126-963-11	ELECT	4.7µF	20%	50V	C368	1-113-619-11	CERAMIC CHIP	0.47µF		10V
C212	1-126-963-11	ELECT	4.7µF	20%	50V	C371	1-115-156-11	CERAMIC CHIP	1µF		10V
C213	1-126-963-11	ELECT	4.7µF	20%	50V	C372	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
C300	1-126-959-11	ELECT	0.47µF	20%	50V	C393	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C302	1-126-963-11	ELECT	4.7µF	20%	50V	C397	1-126-933-11	ELECT	100µF	20%	16V
C303	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C400	1-128-934-91	CERAMIC CHIP	0.33µF	20%	10V
C305	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C401	1-164-227-11	CERAMIC CHIP	0.022µF	10%	25V
C309	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C402	1-164-174-11	CERAMIC CHIP	0.0082µF	10%	25V
C311	1-126-947-11	ELECT	47µF	20%	25V	C403	1-162-967-11	CERAMIC CHIP	0.0033µF	10%	50V
C313	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C404	1-162-967-11	CERAMIC CHIP	0.0033µF	10%	50V
C319	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C405	1-164-677-11	CERAMIC CHIP	0.033µF	10%	16V
C320	1-126-959-11	ELECT	0.47µF	20%	50V	C406	1-164-677-11	CERAMIC CHIP	0.033µF	10%	16V
C321	1-126-947-11	ELECT	47µF	20%	25V	C407	1-162-965-11	CERAMIC CHIP	0.0015µF	10%	50V
C322	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C408	1-162-965-11	CERAMIC CHIP	0.0015µF	10%	50V
C325	1-162-923-11	CERAMIC CHIP	47pF	5%	50V	C409	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C326	1-164-373-11	CERAMIC CHIP	0.033µF		25V	C410	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
C327	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C411	1-128-934-91	CERAMIC CHIP	0.33µF	20%	10V
C330	1-126-964-11	ELECT	10µF	20%	50V	C412	1-126-961-11	ELECT	2.2µF	20%	50V
C333	1-126-963-11	ELECT	4.7µF	20%	50V	C413	1-126-960-11	ELECT	1µF	20%	50V
C335	1-162-918-11	CERAMIC CHIP	18pF	5%	50V	C414	1-126-960-11	ELECT	1µF	20%	50V
C337	1-164-315-11	CERAMIC CHIP	470pF	5%	50V	C415	1-126-960-11	ELECT	1µF	20%	50V
C338	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C416	1-126-960-11	ELECT	1µF	20%	50V
C339	1-113-619-11	CERAMIC CHIP	0.47µF		10V	C417	1-115-416-11	CERAMIC CHIP	0.001µF	5%	25V

**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

**A**

REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
C418	1-126-963-11	ELECT	4.7μF	20%	50V	C515	1-104-987-11	MYLAR	0.001μF	10%	100V
C420	1-126-960-11	ELECT	1μF	20%	50V	 C516	1-115-521-11	FILM (KV-32FV300/36FV300 ONLY)	0.82μF	5%	250V
C422	1-126-935-11	ELECT	470μF	20%	16V	 C516	1-115-522-11	FILM (KV-27FV300/29FV300 ONLY)	1μF	5%	250V
C426	1-126-964-11	ELECT	10μF	20%	50V	C517	1-107-649-11	ELECT	2.2μF	20%	250V
C427	1-126-964-11	ELECT	10μF	20%	50V	C518	1-106-387-00	MYLAR	0.068μF	10%	200V
C428	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C519	1-107-612-11	CERAMIC	100pF	5%	500V
C429	1-127-715-91	CERAMIC CHIP	0.22μF	10%	16V	C520	1-164-646-11	CERAMIC	2200pF	10%	500V
C430	1-162-968-11	CERAMIC CHIP	0.0047μF	10%	50V	C521	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
C431	1-127-715-91	CERAMIC CHIP	0.22μF	10%	16V	C522	1-126-960-11	ELECT	1μF	20%	50V
C432	1-104-665-11	ELECT	100μF	20%	25V	C525	1-102-244-00	CERAMIC	220pF	10%	500V
C433	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V	C526	1-107-662-11	ELECT	22μF	20%	250V
C434	1-162-968-11	CERAMIC CHIP	0.0047μF	10%	50V	 C527	1-162-116-00	CERAMIC	680pF	10%	2KV
C435	1-162-968-11	CERAMIC CHIP	0.0047μF	10%	50V	C528	1-162-966-11	CERAMIC CHIP	0.0022μF	10%	50V
C442	1-127-715-91	CERAMIC CHIP	0.22μF	10%	16V	C529	1-128-551-11	ELECT	22μF	20%	25V
(KV-32FV300/36FV300 ONLY)						C530	1-130-475-00	MYLAR	0.0022μF	5%	50V
C443	1-127-715-91	CERAMIC CHIP	0.22μF	10%	16V	 C531	1-126-965-91	ELECT	22μF	20%	50V
(KV-32FV300/36FV300 ONLY)						 C532	1-126-965-91	ELECT	22μF	20%	50V
C452	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	C534	1-126-967-11	ELECT	47μF	20%	50V
C453	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V	 C535	1-136-165-00	FILM	0.1μF	5%	50V
C501	1-102-110-00	CERAMIC	220pF	10%	50V	C537	1-126-941-11	ELECT	470μF	20%	25V
C502	1-126-959-11	ELECT	0.47μF	20%	50V	C539	1-126-941-11	ELECT	470μF	20%	25V
C503	1-164-315-11	CERAMIC CHIP	470pF	5%	50V	C540	1-107-995-11	ELECT	100μF	10%	160V
C504	1-102-228-00	CERAMIC	470pF	10%	500V	C541	1-128-560-11	ELECT	22μF	20%	100V
C505	1-102-228-00	CERAMIC	470pF	10%	500V	C544	1-129-718-00	FILM	0.022μF	5%	630V
C506	1-106-383-00	MYLAR	0.047μF	10%	200V	C545	1-106-387-00	MYLAR	0.068μF	10%	200V
 C507	1-162-116-00	CERAMIC	680pF	10%	2KV	C546	1-104-987-11	MYLAR (KV-32FV300/36FV300 ONLY)	0.001μF	10%	100V
C508	1-102-228-00	CERAMIC	470pF	10%	500V	C547	1-104-987-11	MYLAR (KV-32FV300/36FV300 ONLY)	0.001μF	10%	100V
 C509	1-162-116-00	CERAMIC	680pF	10%	2KV	C550	1-102-002-00	CERAMIC (KV-32FV300/36FV300 ONLY)	680pF	10%	500V
C510	1-137-150-11	MYLAR	0.01μF	10%	100V	C550	1-164-735-11	CERAMIC (KV-27FV300/29FV300 ONLY)	0.0015μF	10%	500V
 C511	1-117-652-11	FILM (KV-32FV300/36FV300 ONLY)	22000pF	3%	1.2KV	C551	1-109-954-11	ELECT	0.47μF	20%	160V
 C511	1-117-717-11	FILM (KV-27FV300/29FV300 ONLY)	17000pF	3%	1.2KV	C552	1-102-244-00	CERAMIC	220pF	10%	500V
C512	1-129-709-91	FILM (KV-27FV300/29FV300 ONLY)	0.0039μF	5%	630V	 C553	1-107-846-11	FILM (KV-27FV300/29FV300 ONLY)	0.1μF	5%	250V
C512	1-129-928-00	FILM (KV-32FV300/36FV300 ONLY)	0.0027μF	10%	630V	 C553	1-117-667-11	FILM (KV-32FV300/36FV300 ONLY)	0.47μF	5%	250V
 C513	1-129-722-00	FILM (KV-27FV300/29FV300 ONLY)	0.047μF	5%	630V	 C554	1-117-629-11	FILM (KV-27FV300/29FV300 ONLY)	2700pF	3%	1.2KV
 C513	1-130-118-91	FILM (KV-32FV300/36FV300 ONLY)	0.051μF	5%	400V						
 C514	1-109-844-11	FILM (KV-27FV300/29FV300 ONLY)	0.68μF	5%	250V						
 C514	1-115-521-11	FILM (KV-32FV300/36FV300 ONLY)	0.82μF	5%	250V						

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REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES
 C554	1-117-635-11	FILM (KV-32FV300/36FV300 ONLY)	4700pF	3%	1.2KV	D008	8-719-404-50	DIODE MA111-TX	
C561	1-126-967-11	ELECT	47μF	20%	50V	D009	8-719-982-22	DIODE MTZJ-T-77-30D	
C563	1-104-666-11	ELECT	220μF	20%	25V	D010	8-719-921-44	DIODE MTZJ-T-77-5.1C	
C564	1-126-960-11	ELECT	1μF	20%	50V	D110	8-719-991-33	DIODE 1SS133T-77	
C565	1-126-969-11	ELECT	220μF	20%	50V	D111	8-719-109-93	DIODE MTZJ-T-77-6.2B	
C568	1-136-169-00	FILM	0.22μF	5%	50V	D112	8-719-109-93	DIODE MTZJ-T-77-6.2B	
C571	1-126-942-61	ELECT	1000μF	20%	25V	D113	8-719-921-44	DIODE MTZJ-T-77-5.1C	
C572	1-126-942-61	ELECT	1000μF	20%	25V	D200	8-719-929-15	DIODE MTZJ-T-77-9.1B	
 C590	1-126-964-11	ELECT	10μF	20%	50V	D201	8-719-929-15	DIODE MTZJ-T-77-9.1B	
C1501	1-107-846-11	FILM (KV-32FV300/36FV300 ONLY)	0.1μF	5%	250V	D209	8-719-929-15	DIODE MTZJ-T-77-9.1B	
C6001	1-126-940-11	ELECT	330μF	20%	25V	D210	8-719-929-15	DIODE MTZJ-T-77-9.1B	
C6002	1-126-947-11	ELECT	47μF	20%	25V	D211	8-719-929-15	DIODE MTZJ-T-77-9.1B	
C6003	1-125-837-91	CERAMIC CHIP	1μF	10%	6.3V	D212	8-719-929-15	DIODE MTZJ-T-77-9.1B	
C6005	1-126-768-11	ELECT	2200μF	20%	16V	D213	8-719-929-15	DIODE MTZJ-T-77-9.1B	
<b>CONNECTOR</b>									
*	CN001	1-560-124-00	PLUG,CONNECTOR	(2.5MM)	4P	D217	8-719-929-15	DIODE MTZJ-T-77-9.1B	
*	CN002	1-564-507-11	PLUG,CONNECTOR		4P	D218	8-719-929-15	DIODE MTZJ-T-77-9.1B	
*	CN003	1-564-509-11	PLUG,CONNECTOR		6P	D219	8-719-929-15	DIODE MTZJ-T-77-9.1B	
*	CN004	1-564-507-11	PLUG,CONNECTOR		4P	D302	8-719-981-99	DIODE MTZJ-T-77-3.3	
*	CN005	1-564-508-11	PLUG,CONNECTOR		5P	D303	8-719-929-15	DIODE MTZJ-T-77-9.1B	
*	CN006	1-564-506-11	PLUG,CONNECTOR		3P	D304	8-719-921-44	DIODE MTZJ-T-77-5.1C	
*	CN303	1-564-511-11	PLUG,CONNECTOR		8P	D305	8-719-929-15	DIODE MTZJ-T-77-9.1B	
*	CN306	1-573-298-21	CONNECTOR, BOARD TO BOARD	20P		D306	8-719-929-15	DIODE MTZJ-T-77-9.1B	
*	CN401	1-564-508-11	PLUG,CONNECTOR		5P	D307	8-719-929-15	DIODE MTZJ-T-77-9.1B	
*	CN410	1-564-506-11	PLUG,CONNECTOR		3P	D308	8-719-929-15	DIODE MTZJ-T-77-9.1B	
*	CN501	1-580-798-11	CONNECTOR PIN (DY)		6P	D309	8-719-929-15	DIODE MTZJ-T-77-9.1B	
*	CN502	1-764-333-11	PLUG,CONNECTOR		10P	D310	8-719-929-15	DIODE MTZJ-T-77-9.1B	
*	CN503	1-564-510-11	PLUG,CONNECTOR		7P	D311	8-719-929-15	DIODE MTZJ-T-77-9.1B	
*	CN504	1-564-509-11	PLUG,CONNECTOR		6P	D312	8-719-929-15	DIODE MTZJ-T-77-9.1B	
*	CN505	1-564-510-11	PLUG,CONNECTOR		7P	D313	8-719-929-15	DIODE MTZJ-T-77-9.1B	
CN600	1-695-915-11	TAB (CONTACT)				D320	8-719-991-33	DIODE 1SS133T-77	
*	CN906	1-564-506-11	PLUG,CONNECTOR		3P	D410	8-719-404-50	DIODE MA111-TX	
*	CN3300	1-691-616-21	CONNECTOR, BOARD TO BOARD	15P		D412	8-719-404-50	DIODE MA111-TX	
*	CN3301	1-691-616-21	CONNECTOR, BOARD TO BOARD	15P		D413	8-719-921-63	DIODE MTZJ-T-77-7.5B	
<b>DIODE</b>									
D002	8-719-921-44	DIODE MTZJ-T-77-5.1C				D415	8-719-991-33	DIODE 1SS133T-77	
D004	8-719-921-44	DIODE MTZJ-T-77-5.1C				D501	8-719-109-89	DIODE MTZJ-T-77-5.6C	
D005	8-719-110-17	DIODE MTZJ-T-77-10B				D502	8-719-945-80	DIODE ERC06-15S	
D006	8-719-110-17	DIODE MTZJ-T-77-10B				 D503	8-719-945-80	DIODE ERC06-15S	
D007	8-719-404-50	DIODE MA111-TX				D504	8-719-312-10	DIODE RU4AM-T3	
						D505	8-719-908-03	DIODE GP08DPKG23	
						D506	8-719-908-03	DIODE GP08DPKG23	
						D507	8-719-991-33	DIODE 1SS133T-77	
						 D508	8-719-991-33	DIODE 1SS133T-77	
						D510	8-719-081-93	DIODE 1N4937/23	
						D511	8-719-970-87	DIODE ERA38-06TP1	

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REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
D512	8-719-970-87	DIODE ERA38-06TP1				<u>JACK</u>	
D513	8-719-110-41	DIODE MTZJ-T-77-15B		J201	1-794-119-11	TERMINAL BLOCK, S	4P
⚠ D515	8-719-075-41	DIODE PR1004GT		J203	1-794-118-11	JACK BLOCK, PIN	3P
D516	8-719-991-33	DIODE 1SS133T-77		J204	1-794-118-11	JACK BLOCK, PIN	3P
D518	8-719-991-33	DIODE 1SS133T-77		J205	1-794-116-11	JACK BLOCK, PIN	2P
⚠ D519	8-719-302-43	DIODE EL1Z-V1		J206	1-794-117-11	JACK BLOCK, PIN	3P
⚠ D520	8-719-991-33	DIODE 1SS133T-77		J207	1-794-116-11	JACK BLOCK, PIN	2P
D521	8-719-921-63	DIODE MTZJ-T-77-7.5X				<u>CHIP CONDUCTOR</u>	
⚠ D522	8-719-991-33	DIODE 1SS133T-77		JR1	1-216-864-11	SHORT	
D523	8-719-109-69	DIODE MTZJ-T-77-3.6B		JR2	1-216-864-11	SHORT	
D524	8-719-109-97	DIODE MTZJ-T-77-6.8B		JR4	1-216-864-11	SHORT	
⚠ D530	8-719-979-85	DIODE RGP15GPKG23		JR5	1-216-864-11	SHORT	
D531	8-719-979-85	DIODE RGP15GPKG23		JR8	1-216-864-11	SHORT	
D534	8-719-302-43	DIODE RGP10GPKG23		JR9	1-216-864-11	SHORT	
D535	8-719-404-50	DIODE MA111-TX		JR10	1-216-864-11	SHORT	
D536	8-719-404-50	DIODE MA111-TX		(KV-32FV300/36FV300 ONLY)			
D561	8-719-075-33	DIODE 1N4003GA		JR12	1-216-864-11	SHORT	
⚠ D580	8-719-991-33	DIODE 1SS133T-77		JR13	1-216-864-11	SHORT	
D590	8-719-991-33	DIODE 1SS133T-77		JR14	1-216-864-11	SHORT	
		<u>FERRITE BEAD</u>		JR15	1-216-864-11	SHORT	
FB501	1-410-397-21	FERRITE	1.1µH	JR202	1-216-864-11	SHORT	
FB502	1-410-397-21	FERRITE	1.1µH	JR301	1-216-864-11	SHORT	
FB503	1-410-397-21	FERRITE	1.1µH	JR302	1-216-864-11	SHORT	
		<u>IC</u>		JR303	1-216-864-11	SHORT	
IC001	6-801-165-01	IC M306V5ME-109SP		JR304	1-216-864-11	SHORT	
IC002	6-701-929-01	IC BD4743G-TR		JR305	1-216-864-11	SHORT	
IC003	8-759-641-86	IC BR24C16F-E2		JR306	1-216-864-11	SHORT	
IC301	8-752-100-49	IC CXA2154AS		JR401	1-216-864-11	SHORT	
IC400	6-701-106-01	IC NJW1134GK1-TE2		JR402	1-216-864-11	SHORT	
IC402	8-759-689-71	IC NJM2188M-TE2		JR403	1-216-864-11	SHORT	
IC403	6-702-114-01	IC BU4051BCF-E2				<u>COIL</u>	
	(KV-32FV300/36FV300 ONLY)			L001	1-410-482-31	INDUCTOR	100µH
IC404	6-702-114-01	IC BU4051BCF-E2		L002	1-410-482-31	INDUCTOR	100µH
	(KV-32FV300/36FV300 ONLY)			L003	1-412-029-11	INDUCTOR	10µH
IC501	8-759-700-07	IC NJM2903M-TE2		L004	1-410-482-31	INDUCTOR	100µH
⚠ IC561	8-759-696-71	IC STV9379		L009	1-410-482-31	INDUCTOR	100µH
	(KV-32FV300/36FV300 ONLY)			L010	1-414-182-11	INDUCTOR	6.8µH
⚠ IC561	8-759-980-58	IC TDA8172		L300	1-410-482-31	INDUCTOR	100µH
	(KV-27FV300/29FV300 ONLY)			L301	1-410-482-31	INDUCTOR	100µH
IC6008	6-701-752-01	IC NJM2930F05		L302	1-412-029-11	INDUCTOR	10µH
				L303	1-410-478-11	INDUCTOR	47µH

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REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
L304	1-410-470-11	INDUCTOR	10µH	Q407	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L501	1-406-677-11	INDUCTOR	10MH	Q501	8-729-140-50	TRANSISTOR 2SC3209LK-TP	
L502	1-412-552-11	INDUCTOR	2.2MH	Q502	6-550-107-01	TRANSISTOR 2SD2645-YB	
L503	1-406-677-11	INDUCTOR	10MH	Q507	8-729-043-95	TRANSISTOR 2SC3840K	
L504	1-406-677-11	INDUCTOR	10MH	Q511	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
L505	1-406-976-11 (KV-32FV300/36FV300 ONLY)	INDUCTOR	68µH	Q512	8-729-809-29	TRANSISTOR 2SC4159-E	
L505	1-406-978-11 (KV-27FV300/29FV300 ONLY)	INDUCTOR	150µH	Q530	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
L511	1-409-955-11	INDUCTOR	8MH	Q531	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
L517	1-412-552-11	INDUCTOR	2.2MH	Q532	8-729-200-17	TRANSISTOR 2SA10910-TPE2	
<b>TRANSISTOR</b>				Q561	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q001	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		Q562	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
Q002	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		Q590	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q003	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		Q6000	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
Q004	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		<b>RESISTOR</b>			
Q005	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R001	1-249-429-11	CARBON	10K 5% 1/4W
Q010	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R002	1-249-409-11	CARBON	220 5% 1/4W
Q110	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R003	1-216-817-11	RES-CHIP	470 5% 1/10W
Q300	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R004	1-216-857-11	RES-CHIP	1M 5% 1/10W
Q304	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R005	1-216-821-11	RES-CHIP	1K 5% 1/10W
Q305	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R006	1-249-417-11	CARBON	1K 5% 1/4W
Q306	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R007	1-216-833-11	RES-CHIP	10K 5% 1/10W
Q307	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R009	1-216-864-11	SHORT	
Q308	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R010	1-249-409-11	CARBON	220 5% 1/4W
Q309	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R011	1-216-821-11	RES-CHIP	1K 5% 1/10W
Q314	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R012	1-216-827-11	RES-CHIP	3.3K 5% 1/10W
Q315	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R013	1-216-833-11	RES-CHIP	10K 5% 1/10W
Q316	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R015	1-216-813-11	RES-CHIP	220 5% 1/10W
Q317	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R016	1-216-813-11	RES-CHIP	220 5% 1/10W
Q319	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R017	1-216-813-11	RES-CHIP	220 5% 1/10W
Q325	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R018	1-216-813-11	RES-CHIP	220 5% 1/10W
Q326	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R019	1-216-829-11	RES-CHIP	4.7K 5% 1/10W
Q400	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R020	1-218-688-11	METAL CHIP	680 0.50% 1/16W
Q401	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R021	1-216-829-11	RES-CHIP	4.7K 5% 1/10W
Q402	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R022	1-218-688-11	METAL CHIP	680 0.50% 1/16W
Q403	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R023	1-216-829-11	RES-CHIP	4.7K 5% 1/10W
Q404	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX (KV-32FV300/36FV300 ONLY)		R024	1-218-688-11	METAL CHIP	680 0.50% 1/16W
Q405	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX (KV-32FV300/36FV300 ONLY)		R025	1-216-813-11	RES-CHIP	220 5% 1/10W
Q406	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX (KV-32FV300/36FV300 ONLY)		R027	1-216-813-11	RES-CHIP	220 5% 1/10W
				R029	1-249-409-11	CARBON	220 5% 1/4W
				R030	1-216-841-11	RES-CHIP	47K 5% 1/10W
				R031	1-216-809-11	RES-CHIP	100 5% 1/10W
				R032	1-216-813-11	RES-CHIP	220 5% 1/10W
				R033	1-249-417-11	CARBON	1K 5% 1/4W

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REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R034	1-216-813-11	RES-CHIP	220	5%	1/10W	R111	1-216-809-11	RES-CHIP	100	5%	1/10W
R035	1-216-813-11	RES-CHIP	220	5%	1/10W	R113	1-247-807-31	CARBON	100	5%	1/4W
R037	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	R114	1-249-409-11	CARBON	220	5%	1/4W
R038	1-249-417-11	CARBON	1K	5%	1/4W	R117	1-216-837-11	RES-CHIP	22K	5%	1/10W
R039	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	R118	1-216-837-11	RES-CHIP	22K	5%	1/10W
R048	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	R120	1-249-413-11	CARBON	470	5%	1/4W
R050	1-216-833-11	RES-CHIP	10K	5%	1/10W	R123	1-249-421-11	CARBON	2.2K	5%	1/4W
R051	1-216-857-11	RES-CHIP	1M	5%	1/10W	(KV-32FV300/36FV300 ONLY)					
R052	1-216-845-11	RES-CHIP	100K	5%	1/10W	R124	1-216-813-11	RES-CHIP	220	5%	1/10W
R053	1-216-821-11	RES-CHIP	1K	5%	1/10W	(KV-32FV300/36FV300 ONLY)					
R054	1-249-417-11	CARBON	1K	5%	1/4W	R125	1-249-421-11	CARBON	2.2K	5%	1/4W
R055	1-216-841-11	RES-CHIP	47K	5%	1/10W	(KV-32FV300/36FV300 ONLY)					
R056	1-216-813-11	RES-CHIP	220	5%	1/10W	R126	1-216-813-11	RES-CHIP	220	5%	1/10W
R057	1-216-845-11	RES-CHIP	100K	5%	1/10W	R127	1-249-421-11	CARBON	2.2K	5%	1/4W
R058	1-216-845-11	RES-CHIP	100K	5%	1/10W	(KV-32FV300/36FV300 ONLY)					
R060	1-249-409-11	CARBON	220	5%	1/4W	R128	1-216-813-11	RES-CHIP	220	5%	1/10W
R061	1-249-437-11	CARBON	47K	5%	1/4W	(KV-32FV300/36FV300 ONLY)					
 R063	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	R129	1-249-409-11	CARBON	220	5%	1/4W
R064	1-216-813-11	RES-CHIP	220	5%	1/10W	R130	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R065	1-216-841-11	RES-CHIP	47K	5%	1/10W	R131	1-216-813-11	RES-CHIP	220	5%	1/10W
R066	1-249-429-11	CARBON	10K	5%	1/4W	R132	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R068	1-216-833-11	RES-CHIP	10K	5%	1/10W	R133	1-216-841-11	RES-CHIP	47K	5%	1/10W
R070	1-216-813-11	RES-CHIP	220	5%	1/10W	R134	1-216-813-11	RES-CHIP	220	5%	1/10W
R071	1-216-841-11	RES-CHIP	47K	5%	1/10W	R135	1-216-813-11	RES-CHIP	220	5%	1/10W
R073	1-249-425-11	CARBON	4.7K	5%	1/4W	R136	1-249-425-11	CARBON	4.7K	5%	1/4W
R074	1-249-417-11	CARBON	1K	5%	1/4W	R137	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R075	1-216-813-11	RES-CHIP	220	5%	1/10W	R139	1-216-813-11	RES-CHIP	220	5%	1/10W
R076	1-216-841-11	RES-CHIP	47K	5%	1/10W	R140	1-249-409-11	CARBON	220	5%	1/4W
R077	1-216-809-11	RES-CHIP	100	5%	1/10W	R145	1-249-401-11	CARBON	47	5%	1/4W
R078	1-216-841-11	RES-CHIP	47K	5%	1/10W	R201	1-216-864-11	SHORT			
 R080	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	R202	1-249-409-11	CARBON	220	5%	1/4W
R085	1-215-924-00	METAL OXIDE	15K	5%	3W	R203	1-216-864-11	SHORT			
R086	1-216-839-11	RES-CHIP	33K	5%	1/10W	R206	1-249-409-11	CARBON	220	5%	1/4W
R087	1-216-837-11	RES-CHIP	22K	5%	1/10W	R207	1-216-845-11	RES-CHIP	100K	5%	1/10W
R089	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	R208	1-249-409-11	CARBON	220	5%	1/4W
R098	1-216-821-11	RES-CHIP	1K	5%	1/10W	R209	1-216-845-11	RES-CHIP	100K	5%	1/10W
R099	1-216-809-11	RES-CHIP	100	5%	1/10W	R210	1-216-813-11	RES-CHIP	220	5%	1/10W
R101	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	R217	1-216-845-11	RES-CHIP	100K	5%	1/10W
R102	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	R218	1-216-845-11	RES-CHIP	100K	5%	1/10W
R103	1-249-425-11	CARBON	4.7K	5%	1/4W	R219	1-216-813-11	RES-CHIP	220	5%	1/10W
R104	1-216-813-11	RES-CHIP	220	5%	1/10W	R220	1-216-813-11	RES-CHIP	220	5%	1/10W
R107	1-216-809-11	RES-CHIP	100	5%	1/10W	R222	1-216-845-11	RES-CHIP	100K	5%	1/10W
R108	1-216-809-11	RES-CHIP	100	5%	1/10W	R223	1-216-813-11	RES-CHIP	220	5%	1/10W
R110	1-247-807-31	CARBON	100	5%	1/4W						

REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R224	1-249-409-11	CARBON	220	5%	1/4W	R343	1-216-833-11	RES-CHIP	10K	5%	1/10W
R225	1-216-845-11	RES-CHIP	100K	5%	1/10W	R344	1-216-853-11	RES-CHIP	470K	5%	1/10W
R228	1-216-845-11	RES-CHIP	100K	5%	1/10W	R345	1-216-845-11	RES-CHIP	100K	5%	1/10W
R229	1-216-845-11	RES-CHIP	100K	5%	1/10W	R346	1-216-845-11	RES-CHIP	100K	5%	1/10W
R230	1-249-409-11	CARBON	220	5%	1/4W	R347	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R231	1-216-813-11	RES-CHIP	220	5%	1/10W	R348	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R232	1-216-853-11	RES-CHIP	470K	5%	1/10W	R349	1-216-864-11	SHORT			
R233	1-216-853-11	RES-CHIP	470K	5%	1/10W	R350	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R234	1-216-813-11	RES-CHIP	220	5%	1/10W	R351	1-216-864-11	SHORT			
R235	1-216-813-11	RES-CHIP	220	5%	1/10W	R352	1-216-864-11	SHORT			
R300	1-216-864-11	SHORT				R353	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R301	1-216-809-11	RES-CHIP	100	5%	1/10W	R354	1-249-425-11	CARBON	4.7K	5%	1/4W
R302	1-216-817-11	RES-CHIP	470	5%	1/10W	R359	1-216-833-11	RES-CHIP	10K	5%	1/10W
R303	1-249-414-11	CARBON	560	5%	1/4W	R368	1-216-864-11	SHORT			
R306	1-216-843-11	RES-CHIP	68K	5%	1/10W	R369	1-216-809-11	RES-CHIP	100	5%	1/10W
R307	1-216-843-11	RES-CHIP	68K	5%	1/10W	R370	1-216-809-11	RES-CHIP	100	5%	1/10W
R308	1-249-429-11	CARBON	10K	5%	1/4W	R372	1-216-864-11	SHORT			
R309	1-216-864-11	SHORT				R374	1-216-833-11	RES-CHIP	10K	5%	1/10W
R320	1-216-864-11	SHORT				R376	1-216-809-11	RES-CHIP	100	5%	1/10W
R322	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	R378	1-216-809-11	RES-CHIP	100	5%	1/10W
R325	1-247-807-31	CARBON	100	5%	1/4W	R379	1-216-809-11	RES-CHIP	100	5%	1/10W
R328	1-216-833-11	RES-CHIP	10K	5%	1/10W	R380	1-216-809-11	RES-CHIP	100	5%	1/10W
R329	1-247-807-31	CARBON	100	5%	1/4W	R381	1-216-821-11	RES-CHIP	1K	5%	1/10W
R331	1-218-716-11	METAL CHIP	10K	0.50%	1/16W	R382	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R332	1-216-809-11	RES-CHIP	100	5%	1/10W	R383	1-249-421-11	CARBON	2.2K	5%	1/4W
R333	1-216-809-11	RES-CHIP	100	5%	1/10W	R384	1-216-840-11	RES-CHIP	39K	5%	1/10W
R334	1-216-821-11	RES-CHIP	1K	5%	1/10W	R385	1-216-813-11	RES-CHIP	220	5%	1/10W
R335	1-216-821-11	RES-CHIP	1K	5%	1/10W	R386	1-216-845-11	RES-CHIP	100K	5%	1/10W
R336	1-216-809-11	RES-CHIP	100	5%	1/10W	R387	1-216-864-11	SHORT			
R337	1-249-417-11	CARBON	1K	5%	1/4W	R388	1-216-821-11	RES-CHIP	1K	5%	1/10W
R338	1-216-864-11	SHORT				R389	1-216-864-11	SHORT			
R339	1-216-840-11	RES-CHIP	39K	5%	1/10W	R390	1-218-285-11	RES-CHIP	75	5%	1/10W
(KV-32FV300/36FV300 ONLY)						R391	1-218-285-11	RES-CHIP	75	5%	1/10W
R339	1-216-851-11	RES-CHIP	330K	5%	1/10W	R393	1-218-285-11	RES-CHIP	75	5%	1/10W
(KV-27FV300/29FV300 ONLY)						R394	1-218-285-11	RES-CHIP	75	5%	1/10W
R340	1-216-861-11	RES-CHIP	2.2M	5%	1/10W	R395	1-218-285-11	RES-CHIP	75	5%	1/10W
(KV-27FV300/29FV300 ONLY)						R396	1-216-853-11	RES-CHIP	470K	5%	1/10W
R340	1-216-863-11	RES-CHIP	3.3M	5%	1/10W	R397	1-249-417-11	CARBON	1K	5%	1/4W
(KV-32FV300/36FV300 ONLY)						R398	1-216-841-11	RES-CHIP	47K	5%	1/10W
R341	1-216-842-11	RES-CHIP	56K	5%	1/10W	R399	1-216-845-11	RES-CHIP	100K	5%	1/10W
(KV-27FV300/29FV300 ONLY)						R400	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R341	1-216-851-11	RES-CHIP	330K	5%	1/10W	R401	1-216-809-11	RES-CHIP	100	5%	1/10W
(KV-32FV300/36FV300 ONLY)						R402	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R342	1-216-839-11	RES-CHIP	33K	5%	1/10W			(KV-32FV300/36FV300 ONLY)			

**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

A component identified by this  symbol indicates that it has been carefully factory-selected to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.

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REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R403	1-216-809-11	RES-CHIP	100	5%	1/10W	 R516	1-218-867-11	RES-CHIP	6.8K	5%	1/10W
R404	1-216-829-11	RES-CHIP	4.7K	5%	1/10W			(KV-36FV300 ONLY)			
		(KV-32FV300/36FV300 ONLY)				R517	1-249-417-11	CARBON	1K	5%	1/4W
R405	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	R518	1-216-833-11	RES-CHIP	10K	5%	1/10W
R406	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	R519	1-249-413-11	CARBON	470	5%	1/4W
R407	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	R520	1-215-907-11	METAL OXIDE	22	5%	3W
R408	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	 R523	1-216-834-11	RES-CHIP	12K	5%	1/10W
R409	1-249-407-11	CARBON	150	5%	1/4W			(KV-32FV300/36FV300 ONLY)			
R411	1-216-817-11	RES-CHIP	470	5%	1/10W	 R523	1-216-837-11	RES-CHIP	22K	5%	1/10W
R412	1-216-821-11	RES-CHIP	1K	5%	1/10W	 R524	1-249-429-11	CARBON	10K	5%	1/4W
R413	1-216-833-11	RES-CHIP	10K	5%	1/10W	 R525	1-249-428-11	CARBON	8.2K	5%	1/4W
R416	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	R526	1-215-905-11	METAL OXIDE	10	5%	3W
R420	1-216-824-11	RES-CHIP	1.8K	5%	1/10W			(KV-32FV300/36FV300 ONLY)			
R421	1-216-846-11	RES-CHIP	120K	5%	1/10W	R526	1-216-377-11	METAL OXIDE	4.7	5%	2W
R422	1-216-861-11	RES-CHIP	2.2M	5%	1/10W			(KV-27FV300/29FV300 ONLY)			
R423	1-216-839-11	RES-CHIP	33K	5%	1/10W	 R528	1-216-837-11	RES-CHIP	22K	5%	1/10W
R424	1-216-843-11	RES-CHIP	68K	5%	1/10W	 R529	1-216-837-11	RES-CHIP	22K	5%	1/10W
R425	1-216-842-11	RES-CHIP	56K	5%	1/10W	 R530	1-216-834-11	RES-CHIP	12K	5%	1/10W
R426	1-216-823-11	RES-CHIP	1.5K	5%	1/10W	 R531	1-216-842-11	RES-CHIP	56K	5%	1/10W
R452	1-249-409-11	CARBON	220	5%	1/4W	 R532	1-216-810-11	RES-CHIP	120	5%	1/10W
R453	1-216-813-11	RES-CHIP	220	5%	1/10W						
R501	1-216-815-11	RES-CHIP	330	5%	1/10W	R533	1-215-879-11	METAL OXIDE	47K	5%	1W
		(KV-27FV300/29FV300 ONLY)				 R536	1-260-288-11	CARBON	0.47	5%	1/2W
R501	1-216-817-11	RES-CHIP	470	5%	1/10W	 R537	1-260-288-11	CARBON	0.47	5%	1/2W
R502	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	R538	1-247-887-00	CARBON	220K	5%	1/4W
 R503	1-249-425-11	CARBON	4.7K	5%	1/4W	R540	1-216-857-11	RES-CHIP	1M	5%	1/10W
R504	1-215-885-00	METAL OXIDE	68	5%	2W						
		(KV-27FV300/29FV300 ONLY)				R541	1-215-894-11	METAL OXIDE	2.2K	5%	2W
R504	1-216-455-21	METAL OXIDE	560	5%	2W	R542	1-216-485-11	METAL OXIDE	5.6K	5%	3W
		(KV-32FV300/36FV300 ONLY)				 R543	1-249-377-11	CARBON	0.47	5%	1/4W
R505	1-249-433-11	CARBON	22K	5%	1/4W	 R545	1-249-387-11	CARBON	3.3	5%	1/4W
R506	1-215-861-00	METAL OXIDE	47	5%	1W	R546	1-215-453-00	METAL	22K	1%	1/4W
R507	1-249-401-11	CARBON	47	5%	1/4W						
R508	1-249-425-11	CARBON	4.7K	5%	1/4W	R547	1-215-457-00	METAL	33K	1%	1/4W
 R509	1-260-328-11	CARBON	1K	5%	1/2W	R548	1-216-485-11	METAL OXIDE	5.6K	5%	3W
						R549	1-215-437-00	METAL	4.7K	1%	1/4W
R510	1-215-883-11	METAL OXIDE	33	5%	2W	 R550	1-249-377-11	CARBON	0.47	5%	1/4W
R512	1-215-910-00	METAL OXIDE	68	5%	3W	R551	1-215-873-00	METAL OXIDE	4.7K	5%	1W
R515	1-216-836-11	RES-CHIP	18K	5%	1/10W						
 R516	1-216-830-11	RES-CHIP	5.6K	5%	1/10W	 R553	1-249-377-11	CARBON	0.47	5%	1/4W
		(KV-32FV300 ONLY)				R554	1-215-876-00	METAL OXIDE	15K	5%	1W
R516	1-216-832-11	RES-CHIP	8.2K	5%	1/10W						
		(KV-27FV300/29FV300 ONLY)				R554	1-215-894-11	METAL OXIDE	2.2K	5%	2W
								(KV-32FV300 ONLY)			
						R555	1-249-441-11	CARBON	100K	5%	1/4W
						R556	1-249-441-11	CARBON	100K	5%	1/4W
						R557	1-249-441-11	CARBON	100K	5%	1/4W

**NOTE:** The components identified by shading and mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

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REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES					
R559	1-216-805-11	RES-CHIP	47	5%	1/10W	R932	1-218-285-11	RES-CHIP	75	5%	1/10W			
R561	1-249-429-11	CARBON	10K	5%	1/4W	R933	1-218-285-11	RES-CHIP	75	5%	1/10W			
⚠ R563	1-214-798-21	METAL	1.8	1%	1/2W	R934	1-218-285-11	RES-CHIP	75	5%	1/10W			
⚠ R564	1-247-895-91	CARBON	470K	5%	1/4W	R940	1-247-807-31	CARBON	100	5%	1/4W			
R565	1-215-889-00	METAL OXIDE	330	5%	2W	R941	1-247-807-31	CARBON	100	5%	1/4W			
R566	1-218-867-11	RES-CHIP	6.8K	5%	1/10W	R942	1-216-841-11	RES-CHIP	47K	5%	1/10W			
⚠ R567	1-249-385-11	CARBON	2.2	5%	1/4W	R947	1-216-864-11	SHORT	R950	1-216-809-11	RES-CHIP	100	5%	1/10W
R568	1-218-867-11	RES-CHIP	6.8K	5%	1/10W	R951	1-216-813-11	RES-CHIP	220	5%	1/10W			
R569	1-249-429-11	CARBON	10K	5%	1/4W	R6001	1-216-833-11	RES-CHIP	10K	5%	1/10W			
R570	1-216-845-11	RES-CHIP	100K	5%	1/10W	R6002	1-216-833-11	RES-CHIP	10K	5%	1/10W			
R571	1-216-837-11	RES-CHIP	22K	5%	1/10W	R6003	1-216-833-11	RES-CHIP	10K	5%	1/10W			
R572	1-216-837-11	RES-CHIP	22K	5%	1/10W	R6004	1-216-821-11	RES-CHIP	1K	5%	1/10W			
R573	1-216-845-11	RES-CHIP	100K	5%	1/10W									
⚠ R574	1-214-798-21	METAL	1.8	1%	1/2W									
R576	1-215-905-11	METAL OXIDE	10	5%	3W									
	(KV-32FV300/36FV300 ONLY)													
R576	1-215-907-11	METAL OXIDE	22	5%	3W	S501	1-572-707-11	SWITCH LEVER	S502	1-572-707-11	SWITCH LEVER			
	(KV-27FV300/29FV300 ONLY)													
R577	1-216-821-11	RES-CHIP	1K	5%	1/10W									
R578	1-214-798-21	METAL	1.8	1%	1/2W									
R580	1-249-441-11	CARBON	100K	5%	1/4W									
R581	1-247-887-00	CARBON	220K	5%	1/4W									
⚠ R590	1-216-809-11	RES-CHIP	100	5%	1/10W									
⚠ R591	1-249-417-11	CARBON	1K	5%	1/4W									
⚠ R592	1-216-363-00	METAL OXIDE	0.33	5%	2W									
⚠ R593	1-249-420-11	CARBON	1.8K	5%	1/4W									
⚠ R594	1-249-429-11	CARBON	10K	5%	1/4W									
⚠ R595	1-247-891-00	CARBON	330K	5%	1/4W									
⚠ R596	1-249-441-11	CARBON	100K	5%	1/4W									
⚠ R597	1-216-864-11	SHORT												
⚠ R598	1-218-867-11	RES-CHIP	6.8K	5%	1/10W									
⚠ R599	1-216-825-11	RES-CHIP	2.2K	5%	1/10W									
R900	1-216-821-11	RES-CHIP	1K	5%	1/10W									
R901	1-216-823-11	RES-CHIP	1.5K	5%	1/10W									
R902	1-216-809-11	RES-CHIP	100	5%	1/10W									
R903	1-216-825-11	RES-CHIP	2.2K	5%	1/10W									
R904	1-216-818-11	RES-CHIP	560	5%	1/10W									
R905	1-216-817-11	RES-CHIP	470	5%	1/10W									
R906	1-249-417-11	CARBON	1K	5%	1/4W									
R907	1-216-833-11	RES-CHIP	10K	5%	1/10W									
R908	1-216-829-11	RES-CHIP	4.7K	5%	1/10W									
R909	1-249-417-11	CARBON	1K	5%	1/4W									
R910	1-216-833-11	RES-CHIP	10K	5%	1/10W									
R912	1-249-417-11	CARBON	1K	5%	1/4W									

REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
<b>BC</b>			C3532	1-126-964-11	ELECT	10µF	20%	50V			
*	A-1400-450-A	BC BOARD, MOUNTED	C3533	1-164-315-11	CERAMIC CHIP	470pF	5%	50V			
			C3534	1-126-960-11	ELECT	1µF	20%	50V			
			C3535	1-162-917-11	CERAMIC CHIP	15pF	5%	50V			
			C3536	1-126-960-11	ELECT	1µF	20%	50V			
		<u>CAPACITOR</u>	C3537	1-126-964-11	ELECT	10µF	20%	50V			
C3355	1-162-964-11	CERAMIC CHIP	0.001µF	10%	50V	C3538	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3356	1-126-964-11	ELECT	10µF	20%	50V	C3539	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3357	1-113-619-11	CERAMIC CHIP	0.47µF		10V	C3541	1-162-921-11	CERAMIC CHIP	33pF	5%	50V
C3358	1-126-940-11	ELECT	330µF	20%	25V	C3542	1-126-964-11	ELECT	10µF	20%	50V
C3359	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C3543	1-135-834-91	CERAMIC CHIP	2.2µF		6.3V
C3360	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V	C3546	1-162-917-11	CERAMIC CHIP	15pF	5%	50V
C3361	1-162-922-11	CERAMIC CHIP	39pF	5%	50V	C3547	1-126-934-11	ELECT	220µF	20%	10V
C3369	1-126-967-11	ELECT	47µF	20%	50V	C3548	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3370	1-126-964-11	ELECT	10µF	20%	50V	C3549	1-126-947-11	ELECT	47µF	20%	16V
C3371	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V	C3550	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3398	1-126-961-11	ELECT	2.2µF	20%	50V	C3551	1-126-947-11	ELECT	47µF	20%	16V
C3504	1-162-920-11	CERAMIC CHIP	27pF	5%	50V	C3552	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3505	1-162-920-11	CERAMIC CHIP	27pF	5%	50V	C3553	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3506	1-164-360-11	CERAMIC CHIP	0.1µF		16V	C3554	1-126-960-11	ELECT	1µF	20%	50V
C3507	1-164-360-11	CERAMIC CHIP	0.1µF		16V	C3555	1-126-934-11	ELECT	220µF	20%	10V
C3509	1-164-360-11	CERAMIC CHIP	0.1µF		16V	C3556	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3510	1-164-392-11	CERAMIC CHIP	390pF	5%	50V	C3557	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3511	1-164-360-11	CERAMIC CHIP	0.1µF		16V	C3558	1-126-947-11	ELECT	47µF	20%	16V
C3512	1-164-360-11	CERAMIC CHIP	0.1µF		16V	C3559	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3513	1-216-864-11	SHORT				C3560	1-126-947-11	ELECT	47µF	20%	16V
C3514	1-162-974-11	CERAMIC CHIP	0.01µF		50V	C3561	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3515	1-164-360-11	CERAMIC CHIP	0.1µF		16V	C3562	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3516	1-164-360-11	CERAMIC CHIP	0.1µF		16V	C3563	1-126-947-11	ELECT	47µF	20%	16V
C3517	1-126-924-11	ELECT	330µF	20%	6.3V	C3564	1-126-947-11	ELECT	47µF	20%	16V
C3518	1-164-360-11	CERAMIC CHIP	0.1µF		16V	C3565	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3519	1-164-360-11	CERAMIC CHIP	0.1µF		16V	C3566	1-162-974-11	CERAMIC CHIP	0.01µF		50V
C3520	1-164-360-11	CERAMIC CHIP	0.1µF		16V	C3580	1-126-940-11	ELECT	330µF	20%	25V
C3521	1-162-920-11	CERAMIC CHIP	27pF	5%	50V	C3581	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3522	1-126-947-11	ELECT	47µF	20%	16V	C3582	1-126-934-11	ELECT	220µF	20%	10V
C3523	1-164-360-11	CERAMIC CHIP	0.1µF		16V	C3583	1-126-934-11	ELECT	220µF	20%	10V
C3524	1-164-360-11	CERAMIC CHIP	0.1µF		16V	C3585	1-107-826-11	CERAMIC CHIP	0.1µF	10%	16V
C3525	1-164-360-11	CERAMIC CHIP	0.1µF		16V	C3590	1-104-665-11	ELECT	100µF	20%	25V
C3526	1-164-360-11	CERAMIC CHIP	0.1µF		16V			<u>CONNECTOR</u>			
C3527	1-164-360-11	CERAMIC CHIP	0.1µF		16V						
C3528	1-164-360-11	CERAMIC CHIP	0.1µF		16V						
C3529	1-164-360-11	CERAMIC CHIP	0.1µF		16V	CN3500	1-573-301-21	CONNECTOR, BOARD TO BOARD 20P			
C3530	1-126-947-11	ELECT	47µF	20%	16V						
C3531	1-164-360-11	CERAMIC CHIP	0.1µF		16V						

REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
<b>DIODE</b>				<b>TRANSISTOR</b>			
D3550	8-719-977-28	DIODE UDVZSTE-1710B		Q3500	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
<b>FERRITE BEAD</b>				Q3501	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
FB3502	1-414-234-22	FERRITE	0µH	Q3502	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
FB3503	1-414-234-22	FERRITE	0µH	Q3503	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
FB3504	1-414-234-22	FERRITE	0µH	Q3504	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
FB3505	1-414-234-22	FERRITE	0µH	Q3505	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
FB3506	1-414-234-22	FERRITE	0µH	Q3506	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
FB3507	1-414-234-22	FERRITE	0µH	Q3508	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
FB3508	1-414-234-22	FERRITE	0µH	Q3509	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
FB3509	1-414-234-22	FERRITE	0µH	Q3510	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
<b>FILTER</b>				Q3511	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
FL3500	1-239-848-21	FILTER, LOW PASS		Q3512	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
FL3501	1-239-848-21	FILTER, LOW PASS		Q3513	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
FL3502	1-239-848-21	FILTER, LOW PASS		Q3514	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
FL3503	1-239-848-21	FILTER, LOW PASS		Q3515	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
FL3504	1-233-736-21	FILTER, EMI		Q3516	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
FL3505	1-233-736-21	FILTER, EMI		Q3517	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX	
FL3506	1-233-736-21	FILTER, EMI		Q3590	8-729-926-14	TRANSISTOR 2SD1292	
<b>IC</b>				<b>RESISTOR</b>			
IC3501	6-700-960-01	IC UPD64083GF-3BA		R3301	1-216-805-11	RES-CHIP	47
IC3502	8-759-462-91	IC TA1226N		R3302	1-216-805-11	RES-CHIP	47
IC3503	8-759-583-47	IC UPC2933T-E1		R3303	1-216-833-11	RES-CHIP	10K
IC3504	6-700-394-01	IC BA25BC0FP-E2		R3364	1-216-845-11	RES-CHIP	100K
IC3505	8-759-394-35	IC BA12T		R3365	1-216-841-11	RES-CHIP	47K
<b>CHIP CONDUCTOR</b>				R3366	1-216-850-11	RES-CHIP	270K
JR3301	1-216-864-11	SHORT		R3369	1-216-843-11	RES-CHIP	68K
JR3302	1-216-864-11	SHORT		R3373	1-216-809-11	RES-CHIP	100
JR3501	1-216-864-11	SHORT		R3505	1-216-864-11	SHORT	5%
<b>COIL</b>				R3506	1-216-864-11	SHORT	1/10W
L3352	1-414-186-31	INDUCTOR	33µH	R3507	1-216-864-11	SHORT	
L3500	1-414-265-21	INDUCTOR	4.7µH	R3508	1-216-864-11	SHORT	
L3501	1-412-058-11	INDUCTOR	10µH	R3509	1-216-821-11	RES-CHIP	1K
L3502	1-412-058-11	INDUCTOR	10µH	R3510	1-216-817-11	RES-CHIP	5%
L3503	1-412-058-11	INDUCTOR	10µH	R3511	1-216-817-11	RES-CHIP	470
L3504	1-412-058-11	INDUCTOR	10µH	R3512	1-216-809-11	RES-CHIP	5%
L3505	1-412-058-11	INDUCTOR	10µH	R3513	1-216-864-11	SHORT	1/10W
				R3514	1-216-809-11	RES-CHIP	100
				R3515	1-216-824-11	RES-CHIP	1.8K
				R3516	1-216-824-11	RES-CHIP	5%
				R3517	1-216-809-11	RES-CHIP	100
				R3518	1-216-809-11	RES-CHIP	5%
				R3519	1-216-864-11	SHORT	1/10W
				R3520	1-218-708-11	METAL CHIP	4.7K
							0.50% 1/16W



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R3521	1-216-817-11	RES-CHIP	470	5%	1/10W	R3570	1-216-839-11	RES-CHIP	33K	5%	1/10W
R3522	1-216-817-11	RES-CHIP	470	5%	1/10W	R3571	1-216-834-11	RES-CHIP	12K	5%	1/10W
R3523	1-216-821-11	RES-CHIP	1K	5%	1/10W	R3572	1-216-821-11	RES-CHIP	1K	5%	1/10W
R3524	1-216-841-11	RES-CHIP	47K	5%	1/10W	R3573	1-216-805-11	RES-CHIP	47	5%	1/10W
R3525	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	R3580	1-215-857-71	METAL OXIDE	10	5%	1W
R3526	1-216-849-11	RES-CHIP	220K	5%	1/10W	R3582	1-216-817-11	RES-CHIP	470	5%	1/10W
R3527	1-218-676-11	METAL CHIP	220	0.50%	1/16W	R3588	1-216-818-11	RES-CHIP	560	5%	1/10W
R3528	1-216-818-11	RES-CHIP	560	5%	1/10W			<u>CRYSTAL</u>			
R3529	1-216-818-11	RES-CHIP	560	5%	1/10W	X3500	1-767-606-11	VIBRATOR, CRYSTAL			
R3530	1-216-829-11	RES-CHIP	4.7K	5%	1/10W						
R3531	1-216-821-11	RES-CHIP	1K	5%	1/10W						
R3532	1-216-809-11	RES-CHIP	100	5%	1/10W						
R3534	1-216-821-11	RES-CHIP	1K	5%	1/10W						
R3535	1-216-809-11	RES-CHIP	100	5%	1/10W						
R3538	1-216-821-11	RES-CHIP	1K	5%	1/10W						
R3539	1-216-818-11	RES-CHIP	560	5%	1/10W			<u>CAPACITOR</u>			
R3540	1-216-821-11	RES-CHIP	1K	5%	1/10W	C2234	1-126-960-11	ELECT	1µF	20%	50V
R3541	1-216-830-11	RES-CHIP	5.6K	5%	1/10W	C2235	1-126-960-11	ELECT	1µF	20%	50V
R3542	1-216-818-11	RES-CHIP	560	5%	1/10W	C2240	1-126-959-11	ELECT	0.47µF	20%	50V
R3543	1-216-821-11	RES-CHIP	1K	5%	1/10W	C2241	1-126-959-11	ELECT	0.47µF	20%	50V
R3544	1-216-821-11	RES-CHIP	1K	5%	1/10W			<u>CONNECTOR</u>			
R3545	1-216-818-11	RES-CHIP	560	5%	1/10W	*	CN1001	1-564-506-11	PLUG,CONNECTOR	3P	
R3547	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	*	CN1002	1-564-508-11	PLUG,CONNECTOR	5P	
R3548	1-216-864-11	SHORT				*	CN1003	1-564-507-11	PLUG,CONNECTOR	4P	
R3549	1-216-825-11	RES-CHIP	2.2K	5%	1/10W						
R3550	1-216-820-11	RES-CHIP	820	5%	1/10W			<u>DIODE</u>			
R3551	1-218-686-11	METAL CHIP	560	0.50%	1/16W	D301	8-719-929-15	DIODE MTZJ-T-77-9.1B			
R3552	1-216-812-11	RES-CHIP	180	5%	1/10W	D2235	8-719-929-15	DIODE MTZJ-T-77-9.1B			
R3553	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	D2236	8-719-929-15	DIODE MTZJ-T-77-9.1B			
R3554	1-216-820-11	RES-CHIP	820	5%	1/10W						
R3555	1-216-834-11	RES-CHIP	12K	5%	1/10W			<u>JACK</u>			
R3556	1-216-839-11	RES-CHIP	33K	5%	1/10W	J2231	1-770-053-12	TERMINAL BLOCK, S (LIGHT ANGLE)			
R3557	1-216-821-11	RES-CHIP	1K	5%	1/10W						
R3558	1-216-805-11	RES-CHIP	47	5%	1/10W			<u>RESISTOR</u>			
R3559	1-216-864-11	SHORT				R1001	1-249-425-11	CARBON	4.7K	5%	1/4W
R3560	1-216-821-11	RES-CHIP	1K	5%	1/10W	R1002	1-249-420-11	CARBON	1.8K	5%	1/4W
R3561	1-216-818-11	RES-CHIP	560	5%	1/10W	R1003	1-249-417-11	CARBON	1K	5%	1/4W
R3563	1-216-864-11	SHORT				R2008	1-249-425-11	CARBON	4.7K	5%	1/4W
R3564	1-216-864-11	SHORT				R2009	1-249-420-11	CARBON	1.8K	5%	1/4W
R3565	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	R2010	1-249-417-11	CARBON	1K	5%	1/4W
R3566	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	R2011	1-249-416-11	CARBON	820	5%	1/4W
R3567	1-216-819-11	RES-CHIP	680	5%	1/10W	R2235	1-249-409-11	CARBON	220	5%	1/4W
R3568	1-216-820-11	RES-CHIP	820	5%	1/10W	R2236	1-249-441-11	CARBON	100K	5%	1/4W
R3569	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	R2237	1-249-409-11	CARBON	220	5%	1/4W

REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R2238	1-249-441-11	CARBON	100K	5%	1/4W	C3321	1-113-619-11	CERAMIC CHIP	0.47µF	10V	
R2239	1-247-804-11	CARBON	75	5%	1/4W	C3322	1-164-373-11	CERAMIC CHIP	0.033µF	25V	
R2240	1-247-804-11	CARBON	75	5%	1/4W	C3323	1-127-715-91	CERAMIC CHIP	0.22µF	10%	16V
R2241	1-247-804-11	CARBON	75	5%	1/4W	C3324	1-162-918-11	CERAMIC CHIP	18pF	5%	50V
						C3327	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
<b><u>SWITCH</u></b>											
S1007	1-762-816-11	SWITCH TACTILE				C3328	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
S1008	1-762-816-11	SWITCH TACTILE				C3329	1-164-315-11	CERAMIC CHIP	470pF	5%	50V
S2001	1-692-431-21	SWITCH TACTILE				C3330	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
S2002	1-692-431-21	SWITCH TACTILE				C3331	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
S2003	1-692-431-21	SWITCH TACTILE				C3332	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
S2004	1-692-431-21	SWITCH TACTILE				C3334	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
S2005	1-692-431-21	SWITCH TACTILE				C3335	1-164-360-11	CERAMIC CHIP	0.1µF	16V	
						C3336	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
						C3337	1-164-360-11	CERAMIC CHIP	0.1µF	16V	
						C3338	1-164-360-11	CERAMIC CHIP	0.1µF	16V	
<b>P</b>											
*	A-1400-456-A	P (VAR) BOARD, MOUNTED				C3339	1-126-965-91	ELECT	22µF	20%	50V
	4-382-854-11	SCREW (M3X10), P, SW (+)				C3340	1-126-947-11	ELECT	47µF	20%	16V
						C3341	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
						C3390	1-104-665-11	ELECT	100µF	20%	25V
						C3391	1-104-665-11	ELECT	100µF	20%	25V
<b><u>CAPACITOR</u></b>											
C100	1-126-968-11	ELECT	100µF	20%	50V	<b><u>CONNECTOR</u></b>					
C102	1-126-947-11	ELECT	47µF	20%	25V	*	CN3302	1-691-632-21	CONNECTOR, BOARD TO BOARD 15P		
C103	1-126-964-11	ELECT	10µF	20%	50V	*	CN3303	1-691-632-21	CONNECTOR, BOARD TO BOARD 15P		
C104	1-126-967-11	ELECT	47µF	20%	50V		CN6600	1-695-915-11	TAB (CONTACT)		
C106	1-162-968-11	CERAMIC CHIP	0.0047µF	10%	50V	<b><u>DIODE</u></b>					
C107	1-126-960-11	ELECT	1µF	20%	50V	D103	8-719-404-50	DIODE MA111-TX			
C109	1-164-230-11	CERAMIC CHIP	220pF	5%	50V	D104	8-719-404-50	DIODE MA111-TX			
C110	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V	D3301	8-719-404-50	DIODE MA111-TX			
C111	1-126-960-11	ELECT	1µF	20%	50V	D3304	8-719-109-72	DIODE MTZJ-T-77-3.9B			
C3300	1-115-156-11	CERAMIC CHIP	1µF		10V	<b><u>IC</u></b>					
C3301	1-115-156-11	CERAMIC CHIP	1µF		10V	IC3301	6-701-754-01	IC M65665ASP			
C3302	1-115-156-11	CERAMIC CHIP	1µF		10V	IC3390	8-759-701-59	IC NJM78M09FA			
C3303	1-126-947-11	ELECT	47µF	20%	16V	<b><u>CHIP CONDUCTOR</u></b>					
C3304	1-164-315-11	CERAMIC CHIP	470pF	5%	50V	JR001	1-216-864-11	SHORT			
C3305	1-164-360-11	CERAMIC CHIP	0.1µF		16V	JR002	1-216-864-11	SHORT			
						<b><u>COIL</u></b>					
C3308	1-126-947-11	ELECT	47µF	20%	16V	L150	1-414-857-11	INDUCTOR	100µH		
C3312	1-164-315-11	CERAMIC CHIP	470pF	5%	50V	L3300	1-412-058-11	INDUCTOR	10µH		
C3313	1-162-927-11	CERAMIC CHIP	100pF	5%	50V	L3301	1-410-682-31	INDUCTOR	470µH		
C3316	1-126-947-11	ELECT	47µF	20%	16V	L3302	1-412-058-11	INDUCTOR	10µH		
C3317	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V						
C3318	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V						
C3319	1-126-947-11	ELECT	47µF	20%	16V						
C3320	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V						



REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
L3303	1-412-058-11	INDUCTOR	10µH	R3311	1-216-819-11	RES-CHIP	680
L3390	1-412-525-31	INDUCTOR	10µH	R3312	1-216-864-11	SHORT	5%
<b>TRANSISTOR</b>							
Q151	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R3313	1-216-864-11	SHORT	1/10W
Q152	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3314	1-216-864-11	SHORT	
Q3300	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3318	1-216-833-11	RES-CHIP	10K
Q3301	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3319	1-216-833-11	RES-CHIP	5%
Q3302	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3320	1-216-829-11	RES-CHIP	1/10W
Q3304	8-729-926-14	TRANSISTOR 2SD1292		R3321	1-216-864-11	SHORT	
Q3305	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3323	1-249-414-11	CARBON	560
Q3307	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R3324	1-216-821-11	RES-CHIP	5%
Q3308	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R3327	1-216-864-11	SHORT	1/10W
Q3309	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R3328	1-216-821-11	RES-CHIP	1K
Q3310	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3329	1-216-864-11	SHORT	5%
Q3312	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		R3330	1-216-821-11	RES-CHIP	1/10W
<b>RESISTOR</b>							
R100	1-216-809-11	RES-CHIP	100 5% 1/10W	R3331	1-216-821-11	RES-CHIP	1K 5% 1/10W
R101	1-216-809-11	RES-CHIP	100 5% 1/10W	R3335	1-215-857-71	METAL OXIDE	10 5% 1W
R103	1-216-837-11	RES-CHIP	22K 5% 1/10W	R3336	1-216-817-11	RES-CHIP	470 5% 1/10W
R104	1-216-839-11	RES-CHIP	33K 5% 1/10W	R3343	1-216-821-11	RES-CHIP	1K 5% 1/10W
R105	1-216-809-11	RES-CHIP	100 5% 1/10W	R3346	1-216-821-11	RES-CHIP	1K 5% 1/10W
R106	1-216-817-11	RES-CHIP	470 5% 1/10W	R3347	1-216-833-11	RES-CHIP	10K 5% 1/10W
R107	1-216-817-11	RES-CHIP	470 5% 1/10W	R3348	1-216-833-11	RES-CHIP	
R108	1-216-825-11	RES-CHIP	2.2K 5% 1/10W	R3350	1-216-864-11	SHORT	
R112	1-216-825-11	RES-CHIP	2.2K 5% 1/10W	R3351	1-216-813-11	RES-CHIP	220 5% 1/10W
R113	1-216-845-11	RES-CHIP	100K 5% 1/10W	R3354	1-216-863-11	RES-CHIP	3.3M 5% 1/10W
R114	1-216-857-11	RES-CHIP	1M 5% 1/10W	R3359	1-216-864-11	SHORT	
R115	1-216-833-11	RES-CHIP	10K 5% 1/10W	R3360	1-216-864-11	SHORT	
R116	1-216-833-11	RES-CHIP	10K 5% 1/10W	R3361	1-216-864-11	SHORT	
R117	1-216-829-11	RES-CHIP	4.7K 5% 1/10W	R3362	1-216-827-11	RES-CHIP	3.3K 5% 1/10W
R3300	1-216-841-11	RES-CHIP	47K 5% 1/10W	R3363	1-216-839-11	RES-CHIP	33K 5% 1/10W
R3301	1-216-821-11	RES-CHIP	1K 5% 1/10W	R3364	1-247-807-31	CARBON	100 5% 1/4W
R3302	1-216-841-11	RES-CHIP	47K 5% 1/10W	R3365	1-247-807-31	CARBON	100 5% 1/4W
R3303	1-216-821-11	RES-CHIP	1K 5% 1/10W	R3368	1-216-833-11	RES-CHIP	10K 5% 1/10W
R3304	1-216-821-11	RES-CHIP	1K 5% 1/10W	R3369	1-216-864-11	SHORT	
R3305	1-216-841-11	RES-CHIP	47K 5% 1/10W	R3372	1-216-864-11	SHORT	
R3306	1-216-837-11	RES-CHIP	22K 5% 1/10W	R3374	1-216-864-11	SHORT	
R3307	1-216-821-11	RES-CHIP	1K 5% 1/10W	R3390	1-216-395-00	METAL OXIDE	3.3 5% 3W
R3308	1-216-837-11	RES-CHIP	22K 5% 1/10W	<b>TUNER</b>			
R3309	1-216-817-11	RES-CHIP	470 5% 1/10W	TU150	8-598-594-00	TUNER, FSS BTF-FA421	
R3310	1-216-841-11	RES-CHIP	47K 5% 1/10W	<b>CRYSTAL</b>			
				X3301	1-781-377-41	VIBRATOR, CRYSTAL	



REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
<b>HR</b>			C415	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V			
*	A-1400-459-A	HR (COM) BOARD, MOUNTED	C416	1-126-947-11	ELECT	47µF	20%	25V			
			C417	1-126-963-11	ELECT	4.7µF	20%	50V			
			C418	1-162-916-11	CERAMIC CHIP	12pF	5%	50V			
			C419	1-162-915-11	CERAMIC CHIP	10pF	0.50pF	50V			
		<u>CAPACITOR</u>	C420	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V			
C3001	1-104-665-11	ELECT	100µF	20%	25V	C421	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
			C422	1-126-947-11	ELECT	47µF	20%	25V			
		<u>CONNECTOR</u>	C423	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V			
CN3001	1-564-521-11	PLUG,CONNECTOR	6P			C424	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V
			C425	1-126-947-11	ELECT	47µF	20%	25V			
		<u>DIODE</u>	C426	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V			
D3002	8-719-057-09	DIODE LNJ801LPDJA				C427	1-126-933-11	ELECT	100µF	20%	16V
		<u>IC</u>						<u>CONNECTOR</u>			
IC3001	8-742-211-20	HYB IC SBX3071-71				*	CN415	1-564-520-11	PLUG,CONNECTOR	5P	
								<u>DIODE</u>			
		<u>RESISTOR</u>					D401	8-719-109-89	DIODE MTZJ-T-77-5.6C		
R3001	1-249-417-11	CARBON	1K	5%	1/4W		D402	8-719-057-93	DIODE SVC203SPA-AL		
R3014	1-247-807-31	CARBON	100	5%	1/4W		D403	8-719-057-93	DIODE SVC203SPA-AL		
		<u>SWITCH</u>					D404	8-719-992-13	DIODE DAL5815		
S3006	1-572-198-11	SWITCH KEYBOARD					D405	8-719-992-13	DIODE DAL5815		
<b>T</b>							D406	8-719-992-13	DIODE DAL5815		
*	A-1400-460-A	T BOARD, MOUNTED (KV-32FV300/36FV300 ONLY)					D407	8-719-992-13	DIODE DAL5815		
							D408	8-719-992-13	DIODE DAL5815		
		<u>CAPACITOR</u>					D409	8-719-992-13	DIODE DAL5815		
C401	1-162-923-11	CERAMIC CHIP	47pF	5%	50V		D410	8-719-992-13	DIODE DAL5815		
C402	1-165-176-11	CERAMIC CHIP	0.047µF	10%	16V		D411	8-719-992-13	DIODE DAL5815		
C403	1-126-963-11	ELECT	4.7µF	20%	50V						
C404	1-164-739-11	CERAMIC CHIP	560pF	5%	50V						
C405	1-126-947-11	ELECT	47µF	20%	25V						
								<u>IC</u>			
							IC401	8-759-939-73	IC BA3308		
								<u>COIL</u>			
							L401	1-411-987-11	COIL (OSC)		
							L402	1-411-988-11	COIL (OSC)		
							L403	1-410-482-31	INDUCTOR	100µH	
								<u>TRANSISTOR</u>			
							Q401	8-729-266-83	TRANSISTOR 2SC2668-YTP		
							Q402	8-729-266-83	TRANSISTOR 2SC2668-YTP		
							Q403	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA		
							Q404	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		
							Q405	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		

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REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
Q406	8-729-931-14	TRANSISTOR 2SD1858-Q-TV2				R436	1-216-797-11	RES-CHIP	10	5%	1/10W
Q407	8-729-931-14	TRANSISTOR 2SD1858-Q-TV2				R437	1-216-797-11	RES-CHIP	10	5%	1/10W
Q408	8-729-931-14	TRANSISTOR 2SD1858-Q-TV2				R438	1-216-797-11	RES-CHIP	10	5%	1/10W
Q409	8-729-931-14	TRANSISTOR 2SD1858-Q-TV2				R439	1-216-826-11	RES-CHIP	2.7K	5%	1/10W
Q410	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R440	1-216-864-11	SHORT			
Q411	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R441	1-216-864-11	SHORT			
<b>RESISTOR</b>						R460	1-216-826-11	RES-CHIP	2.7K	5%	1/10W
R401	1-216-841-11	RES-CHIP	47K	5%	1/10W	<b>C</b>					
R402	1-216-841-11	RES-CHIP	47K	5%	1/10W	*	<b>A-1400-455-A</b> C (COM) BOARD, MOUNTED (KV-27FV300/29FV300/32FV300 ONLY)				
R403	1-216-841-11	RES-CHIP	47K	5%	1/10W	*	<b>A-1400-580-A</b> C (VAR) BOARD, MOUNTED (KV-36FV300 ONLY)				
R404	1-216-823-11	RES-CHIP	1.5K	5%	1/10W		4-382-854-11 SCREW (M3X10), P, SW (+)				
R405	1-216-809-11	RES-CHIP	100	5%	1/10W	<b>CAPACITOR</b>					
R406	1-216-823-11	RES-CHIP	1.5K	5%	1/10W	C701	1-126-947-11	ELECT	47µF	20%	25V
R407	1-216-863-11	RES-CHIP	3.3M	5%	1/10W	C702	1-136-165-00	FILM	0.1µF	5%	50V
R408	1-216-841-11	RES-CHIP	47K	5%	1/10W	C703	1-126-947-11	ELECT	47µF	20%	25V
R409	1-216-823-11	RES-CHIP	1.5K	5%	1/10W	C704	1-107-652-11	ELECT	10µF	20%	250V
R410	1-216-823-11	RES-CHIP	1.5K	5%	1/10W	C705	1-107-652-11	ELECT	10µF	20%	250V
R411	1-216-809-11	RES-CHIP	100	5%	1/10W	C706	1-137-528-11	MYLAR	0.1µF	10%	250V
R412	1-218-713-11	METAL CHIP	7.5K	0.50%	1/16W	C707	1-162-114-00	CERAMIC	0.0047µF		2KV
R413	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	C708	1-136-165-00	FILM	0.1µF	5%	50V
R414	1-216-833-11	RES-CHIP	10K	5%	1/10W	C709	1-126-964-11	ELECT	10µF	20%	50V
R415	1-249-411-11	CARBON	330	5%	1/4W	C710	1-126-964-11	ELECT	10µF	20%	50V
R416	1-216-837-11	RES-CHIP	22K	5%	1/10W	C711	1-102-074-00	CERAMIC	0.001µF	10%	50V
R417	1-216-837-11	RES-CHIP	22K	5%	1/10W	<b>CONNECTOR</b>					
R418	1-216-829-11	RES-CHIP	4.7K	5%	1/10W	*	CN701	1-564-506-11	PLUG,CONNECTOR		3P
R419	1-216-833-11	RES-CHIP	10K	5%	1/10W	CN702	1-695-915-11	TAB (CONTACT)			
R420	1-216-852-11	RES-CHIP	390K	5%	1/10W	CN704	1-785-879-11	CONNECTOR, ONE TOUCH			
R421	1-216-809-11	RES-CHIP	100	5%	1/10W	*	CN705	1-564-511-11	PLUG,CONNECTOR		8P
R422	1-216-809-11	RES-CHIP	100	5%	1/10W	*	CN706	1-564-510-11	PLUG,CONNECTOR		7P
R423	1-216-852-11	RES-CHIP	390K	5%	1/10W	*	CN707	1-560-124-00	PLUG,CONNECTOR (2.5MM)		4P
R424	1-216-823-11	RES-CHIP	1.5K	5%	1/10W	(KV-36FV300 ONLY)					
R425	1-216-827-11	RES-CHIP	3.3K	5%	1/10W	<b>DIODE</b>					
R426	1-218-731-11	METAL CHIP	43K	0.50%	1/16W	D701	8-719-901-83	DIODE 1SS83TD			
R427	1-216-827-11	RES-CHIP	3.3K	5%	1/10W	D702	8-719-901-83	DIODE 1SS83TD			
R428	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	D703	8-719-901-83	DIODE 1SS83TD			
R429	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	D704	8-719-302-43	DIODE RGP10GPKG23			
R430	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W						
R431	1-218-700-11	METAL CHIP	2.2K	0.50%	1/16W						
R432	1-218-731-11	METAL CHIP	43K	0.50%	1/16W						
R433	1-216-826-11	RES-CHIP	2.7K	5%	1/10W						
R434	1-216-826-11	RES-CHIP	2.7K	5%	1/10W						
R435	1-216-797-11	RES-CHIP	10	5%	1/10W						

**NOTE:** The components identified by shading and  mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifies per un trame et une marque  sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

CV

REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
		<u>IC</u>					<b>V</b>				
IC701	8-759-803-42	IC LA6500-FA				*	A-1400-461-A	V (VAR) BOARD, MOUNTED (KV-32FV300 ONLY)			
IC702	8-759-562-43	IC TDA6108JF/N1B				*	A-1400-565-A	V (VAR) BOARD, MOUNTED (KV-27FV300/29FV300 ONLY)			
		<u>COIL</u>				*	A-1400-581-A	V (VAR) BOARD, MOUNTED (KV-36FV300 ONLY)			
L701	1-408-613-31	INDUCTOR	68μH				4-382-854-11	SCREW (M3X10), P, SW (+)			
		<u>TRANSISTOR</u>						<u>CAPACITOR</u>			
Q700	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA				C802	1-126-964-11	ELECT	10μF	20%	50V
Q701	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA				C803	1-137-378-11	MYLAR	0.22μF	5%	50V
		<u>RESISTOR</u>				C804	1-137-378-11	MYLAR	0.22μF	5%	50V
R700	1-249-433-11	CARBON	22K	5%	1/4W	C805	1-129-763-61	FILM	0.033μF	5%	200V
R701	1-249-429-11	CARBON	10K	5%	1/4W	C808	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
R702	1-249-409-11	CARBON	220	5%	1/4W	C809	1-128-934-91	CERAMIC CHIP	0.33μF	20%	10V
R703	1-247-807-31	CARBON	100	5%	1/4W	C810	1-130-495-00	MYLAR	0.1μF	5%	50V
R704	1-249-426-11	CARBON	5.6K	5%	1/4W	C811	1-129-765-00	FILM	0.047μF	5%	200V
R705	1-249-429-11	CARBON	10K	5%	1/4W	C812	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
R706	1-249-381-11	CARBON	1	5%	1/4W	C813	1-126-933-11	ELECT	100μF	20%	16V
⚠ R707	1-249-383-11	CARBON	1.5	5%	1/4W	C821	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
R708	1-247-807-31	CARBON	100	5%	1/4W	C823	1-130-967-00	FILM	0.0027μF	5%	50V
R709	1-247-807-31	CARBON	100	5%	1/4W	C824	1-165-176-11	CERAMIC CHIP	0.047μF	10%	16V
R710	1-247-807-31	CARBON	100	5%	1/4W	C826	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
R711	1-260-328-11	CARBON	1K	5%	1/2W	C862	1-126-964-11	ELECT	10μF	20%	50V
R712	1-260-328-11	CARBON	1K	5%	1/2W	C901	1-107-667-11	ELECT	2.2μF	20%	160V
R713	1-260-328-11	CARBON	1K	5%	1/2W	C902	1-107-364-11	MYLAR	0.01μF	10%	200V
R714	1-260-087-11	CARBON	100	5%	1/2W	C903	1-126-935-11	ELECT	470μF	20%	16V
R715	1-260-132-11	CARBON	560K	5%	1/2W	C904	1-130-471-00	MYLAR	0.001μF	5%	50V
R716	1-260-123-11	CARBON	100K	5%	1/2W	C905	1-107-364-11	MYLAR	0.01μF	10%	200V
R718	1-216-373-11	METAL OXIDE	2.2	5%	2W	C906	1-130-471-00	MYLAR	0.001μF	5%	50V
R719	1-215-888-00	METAL OXIDE	220	5%	2W	C907	1-107-963-11	ELECT	33μF	20%	160V
R720	1-249-421-11	CARBON	2.2K	5%	1/4W	C908	1-126-935-11	ELECT	470μF	20%	16V
R721	1-249-421-11	CARBON	2.2K	5%	1/4W	C909	1-104-999-11	MYLAR	0.1μF	10%	200V
R722	1-247-807-31	CARBON	100	5%	1/4W	C910	1-104-999-11	MYLAR	0.1μF	10%	200V
R723	1-247-807-31	CARBON	100	5%	1/4W	C911	1-126-933-11	ELECT	100μF	20%	16V
R724	1-247-807-31	CARBON	100	5%	1/4W	C912	1-126-933-11	ELECT	100μF	20%	16V
		<u>VARIABLE RESISTOR</u>				C913	1-102-074-00	CERAMIC	0.001μF	10%	50V
RV701	1-241-656-11	RES,ADJ, METAL,FILM	110M			C914	1-130-491-00	MYLAR	0.047μF	5%	50V
						C930	1-126-935-11	ELECT	470μF	20%	6.3V
						C931	1-126-935-11	ELECT	470μF	20%	6.3V

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REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
<b>CONNECTOR</b>							
* CN901	1-764-333-11	PLUG,CONNECTOR	10P	Q907	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR	
* CN902	1-770-723-11	CONNECTOR, BOARD TO BOARD	8P	Q908	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX	
<b>RESISTOR</b>							
<b>DIODE</b>							
D804	8-719-302-43	DIODE RGP10GPKG23		R809	1-216-832-11	RES-CHIP	8.2K
D805	8-719-991-33	DIODE ISS133T-77		R811	1-249-393-11	CARBON	10
D806	8-719-991-33	DIODE ISS133T-77		R814	1-215-862-11	METAL OXIDE	68
D807	8-719-210-21	DIODE ERA82-004TP5		R815	1-215-862-11	(KV-32FV300/36FV300 ONLY)	5%
D808	8-719-991-33	DIODE 1SS133T-77		R817	1-218-734-11	METAL CHIP	1W
				R818	1-216-809-11	RES-CHIP	56K
				R819	1-216-841-11	RES-CHIP	100
D813	8-719-991-33	DIODE 1SS133T-77		R820	1-216-837-11	RES-CHIP	5%
D901	8-719-924-11	DIODE MTZJ-T-77-22		R821	1-218-728-11	METAL CHIP	1/10W
D902	8-719-924-11	DIODE MTZJ-T-77-22		R822	1-216-841-11	RES-CHIP	33K
D903	8-719-991-33	DIODE 1SS133T-77		R824	1-218-740-11	METAL CHIP	0.50%
D905	8-719-510-02	DIODE D1NS4-TR		R825	1-216-845-11	RES-CHIP	1/16W
D906	8-719-404-50	DIODE MA111-TX		R826	1-249-421-11	CARBON	100K
D907	8-719-404-50	DIODE MA111-TX		R827	1-218-708-11	METAL CHIP	5%
D908	8-719-404-50	DIODE MA111-TX		R828	1-218-728-11	METAL CHIP	1/16W
				R829	1-216-797-11	RES-CHIP	68K
<b>IC</b>							
IC801	6-701-598-01	IC UPC5023CS-184		R833	1-216-830-11	RES-CHIP	5.6K
<b>CHIP CONDUCTOR</b>							
JR802	1-216-864-11	SHORT		R834	1-216-830-11	RES-CHIP	5.6K
				R840	1-218-736-11	METAL CHIP	0.50%
				R841	1-216-826-11	RES-CHIP	1/10W
<b>COIL</b>							
L801	1-406-989-21	INDUCTOR	10MH	R842	1-216-825-11	RES-CHIP	2.2K
L802	1-459-111-00	INDUCTOR	10MH	R855	1-216-835-11	RES-CHIP	5%
L803	1-412-529-81	INDUCTOR	22μH	R856	1-216-827-11	RES-CHIP	15K
L901	1-412-528-11	INDUCTOR	18μH	R857	1-218-728-11	METAL CHIP	3.3K
				R860	1-216-833-11	RES-CHIP	0.50%
<b>TRANSISTOR</b>							
Q805	6-550-106-01	TRANSISTOR KTB764		R864	1-218-668-11	METAL CHIP	10K
Q807	8-729-931-45	TRANSISTOR IRF614		R866	1-249-438-11	CARBON	100
Q808	6-550-106-01	TRANSISTOR KTB764		R870	1-216-825-11	RES-CHIP	56K
Q812	8-729-026-39	TRANSISTOR 2SA933AS-QRT		R876	1-216-821-11	RES-CHIP	2.2K
Q901	8-729-045-04	TRANSISTOR 2SC5511		R890	1-218-867-11	RES-CHIP	1K
				R893	1-216-839-11	RES-CHIP	6.8K
Q902	8-729-045-05	TRANSISTOR 2SA2005		 R901	1-249-405-11	CARBON	5%
Q903	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		 R902	1-249-385-11	CARBON	1/4W
Q904	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX		 R903	1-249-414-11	CARBON	2.2
Q905	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX		R904	1-249-432-11	CARBON	560
Q906	8-729-120-28	TRANSISTOR 2SC2412K-T-146-QR		R905	1-249-421-11	CARBON	5%
				R906	1-249-432-11	CARBON	1/4W
				 R907	1-249-385-11	CARBON	18K
				 R908	1-249-414-11	CARBON	2.2
				R909	1-260-316-51	CARBON	5/14W
							100

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REF. NO.	PART NO.	DESCRIPTION	VALUES			REF. NO.	PART NO.	DESCRIPTION	VALUES		
R910	1-215-915-11	METAL OXIDE	470	5%	3W	C617	1-123-024-21	ELECT	33μF	160V	
R911	1-249-411-11	CARBON	330	5%	1/4W	C618	1-126-943-11	ELECT	2200μF	20%	25V
R912	1-249-407-11	CARBON	150	5%	1/4W	C620	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
R913	1-249-399-11	CARBON	33	5%	1/4W	C621	1-117-894-11	ELECT	560μF	20%	250V
R914	1-249-416-11	CARBON	820	5%	1/4W	C624	1-107-636-11	ELECT	10μF	20%	160V
R915	1-249-425-11	CARBON	4.7K	5%	1/4W	C629	1-117-894-11	ELECT	560μF	20%	250V
R917	1-249-425-11	CARBON	4.7K	5%	1/4W	C632	1-126-947-11	ELECT	47μF	20%	25V
R918	1-249-401-11	CARBON	47	5%	1/4W	C633	1-136-479-11	FILM	0.001μF	2%	50V
R919	1-249-401-11	CARBON	47	5%	1/4W	C634	1-126-964-11	ELECT	10μF	20%	50V
R921	1-249-429-11	CARBON	10K	5%	1/4W	C635	1-126-963-11	ELECT	4.7μF	20%	50V
R922	1-249-397-11	CARBON	22	5%	1/4W	C637	1-136-165-00	FILM	0.1μF	5%	50V
R923	1-249-401-11	CARBON	47	5%	1/4W	C638	1-104-665-11	ELECT	100μF	20%	25V
R930	1-216-864-11	SHORT				C640	1-126-942-61	ELECT	1000μF	20%	25V
R931	1-249-421-11	CARBON	2.2K	5%	1/4W	C642	1-126-969-11	ELECT	220μF	20%	50V
R932	1-218-696-11	METAL CHIP	1.5K	0.50%	1/16W	C643	1-136-165-00	FILM	0.1μF	5%	50V
R933	1-216-864-11	SHORT				C645	1-162-964-11	CERAMIC CHIP	0.001μF	10%	50V
 R935	1-249-405-11	CARBON	100	5%	1/4W	C647	1-126-947-11	ELECT	47μF	20%	25V
R938	1-216-864-11	SHORT				C648	1-104-330-91	CERAMIC	470pF	10%	1KV
						C649	1-104-330-91	CERAMIC	470pF	10%	1KV
						C650	1-128-550-11	ELECT	2200μF	20%	50V
						C651	1-126-942-61	ELECT	1000μF	20%	25V
						C652	1-165-176-11	CERAMIC CHIP	0.047μF	10%	16V
						C653	1-126-960-11	ELECT	1μF	20%	50V
						C656	1-161-964-91	CERAMIC	0.0047μF	250V	
						C658	1-161-964-91	CERAMIC	0.0047μF	250V	
						C665	1-126-942-61	ELECT	1000μF	20%	25V
						C667	1-164-625-11	CERAMIC	680pF	10%	500V
						C668	1-164-625-11	CERAMIC	680pF	10%	500V
						C669	1-164-625-11	CERAMIC	680pF	10%	500V
						C670	1-164-625-11	CERAMIC	680pF	10%	500V
						C672	1-135-946-21	FILM	47000pF	3%	800V
*	A-1400-452-A	GK (VAR) BOARD, MOUNTED (KV-27FV300/29FV300(N)/32FV300 ONLY)				C690	1-126-971-11	ELECT	470μF	20%	50V
*	A-1400-583-A	GK (VAR) BOARD, MOUNTED (KV-36FV300 ONLY)				C1401	1-137-652-91	CERAMIC CHIP	39000pF	10%	16V
*	A-1400-608-A	GK (VAR) BOARD, MOUNTED (KV-29FV300(S) ONLY)				C1402	1-164-172-11	CERAMIC CHIP	0.0056μF	10%	25V
	1-533-223-11	HOLDER, FUSE				C1403	1-107-826-11	CERAMIC CHIP	0.1μF	10%	16V
*	4-374-846-11	COVER,CAPACITOR, CAP TYPE				C1404	1-162-927-11	CERAMIC CHIP	100pF	5%	50V
	4-382-854-11	SCREW (M3X10), P, SW (+)				C1405	1-126-947-11	ELECT	47μF	20%	25V
	4-382-854-11	SCREW (M3X10), P, SW (+)				C1406	1-162-970-11	CERAMIC CHIP	0.01μF	10%	25V
		<u>CAPACITOR</u>				C1407	1-126-965-91	ELECT	22pF	20%	50V
C501	1-165-529-11	MYLAR	0.22μF	10%	275V	C1408	1-126-768-11	ELECT	2200μF	20%	16V
C600	1-117-703-11	CERAMIC	0.0047μF	20%	250V						
		(KV-29FV300(S) ONLY)				C1413	1-127-715-91	CERAMIC CHIP	0.22μF	10%	16V
 C601	1-165-529-11	MYLAR	0.22μF	10%	275V	C1450	1-135-572-51	ELECT	1000μF	20%	50V
 C603	1-165-529-11	MYLAR	0.22μF	10%	275V	C1451	1-113-619-11	CERAMIC CHIP	0.47μF	10%	10V
						C1452	1-125-891-11	CERAMIC CHIP	0.47μF	10%	10V
C604	1-164-625-11	CERAMIC	680pF	10%	500V						
 C607	1-119-912-51	CERAMIC	1000pF	20%	250V						
 C608	1-119-912-51	CERAMIC	1000pF	20%	250V						
C609	1-164-625-11	CERAMIC	680pF	10%	500V						
C616	1-126-943-11	ELECT	2200μF	20%	25V						



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C1458	1-162-970-11	CERAMIC CHIP	0.01µF	10%	25V			<b>FUSE</b>			
C1461	1-113-619-11	CERAMIC CHIP	0.47µF		10V	⚠ F601	1-576-193-11	FUSE	6.3A/125V		
C1462	1-113-619-11	CERAMIC CHIP	0.47µF		10V			(KV-27FV300/29FV300(N)/32FV300/36FV300 ONLY)			
C1463	1-126-968-11	ELECT	100µF	20%	50V	⚠ F601	1-532-506-51	FUSE	6.3A/250V		
<b>CONNECTOR</b>											
*	CN503	1-573-963-11	PIN,CONNECTOR (PC BOARD)	3P				<b>FERRITE BEAD</b>			
	CN600	1-580-843-11	PIN,CONNECTOR (POWER)			FB602	1-410-397-21	FERRITE	1.1µH		
*	CN602	1-564-510-11	PLUG,CONNECTOR	7P		FB604	1-410-397-21	FERRITE	1.1µH		
	CN603	1-695-915-11	TAB (CONTACT)			FB605	1-410-397-21	FERRITE	1.1µH		
	CN604	1-695-915-11	TAB (CONTACT)			FB609	1-410-397-21	FERRITE	1.1µH		
			(KV-27FV300/29FV300(N)/32FV300/36FV300 ONLY)			FB610	1-410-397-21	FERRITE	1.1µH		
*	CN605	1-564-506-11	PLUG,CONNECTOR	3P							
*	CN1401	1-564-507-11	PLUG,CONNECTOR	4P		FB611	1-410-397-21	FERRITE	1.1µH		
	CN1402	1-564-505-11	PLUG,CONNECTOR	2P		FB612	1-410-397-21	FERRITE	1.1µH		
*	CN1405	1-564-506-11	PLUG,CONNECTOR	3P		FB614	1-410-397-21	FERRITE	1.1µH		
*	CN1601	1-564-509-11	PLUG,CONNECTOR	6P		FB616	1-410-397-21	FERRITE	1.1µH		
						FB617	1-410-397-21	FERRITE	1.1µH		
<b>DIODE</b>											
D501	8-719-404-50	DIODE MA111-TX						<b>IC</b>			
D600	8-719-510-53	DIODE D4SB60L-F				IC600	8-759-670-30	IC MCZ3001D			
D601	8-719-511-40	DIODE S1VB20				IC601	8-749-012-13	IC DM-58			
D611	8-719-062-40	DIODE D4SBL20µF3				⚠ IC602	1-761-541-11	SELECTION UNIT, RECTIFICATION			
D612	8-719-068-00	DIODE ERC04-06SE						(KV-36FV300 ONLY)			
			(KV-27FV300/29FV300(N)/32FV300/36FV300 ONLY)			IC605	8-759-450-47	IC BA05T			
D613	8-719-068-00	DIODE ERC04-06SE				IC609	8-759-653-07	IC PQ09RD21			
			(KV-27FV300/29FV300(N)/32FV300/36FV300 ONLY)			IC1405	8-759-573-40	IC TDA8580Q/N1			
D614	8-719-057-52	DIODE EZ0150AV1				IC1406	8-759-100-96	IC NJM4558M-TE2			
D615	8-719-062-40	DIODE D4SBL20µF3									
D618	8-719-979-64	DIODE µF4005PKG23						<b>CHIP CONDUCTOR</b>			
D620	8-719-404-50	DIODE MA111-TX				JR1	1-216-864-11	SHORT			
D621	6-500-181-01	DIODE MA6D50				JR2	1-216-864-11	SHORT			
D624	8-719-510-12	DIODE D10SC4M				JR3	1-216-864-11	SHORT			
D625	8-719-510-02	DIODE D1NS4-TA2				JR6	1-216-864-11	SHORT			
D628	8-719-404-50	DIODE MA111-TX				JR1400	1-216-864-11	SHORT			
D629	8-719-110-31	DIODE MTZJ-T-77-12C				JR1401	1-216-864-11	SHORT			
D631	8-719-063-70	DIODE D1NL20U-TA2				JR1404	1-216-864-11	SHORT			
D640	8-719-404-50	DIODE MA111-TX				JR1405	1-216-864-11	SHORT			
D641	8-719-404-50	DIODE MA111-TX				JR1409	1-216-864-11	SHORT			
D645	8-719-063-70	DIODE D1NL20U-TA2				JR1411	1-216-864-11	SHORT			
D646	8-719-404-50	DIODE MA111-TX				JR1412	1-216-864-11	SHORT			
D647	8-719-063-70	DIODE D1NL20U-TA2						<b>COIL</b>			
D690	8-719-982-13	DIODE MTZJ-T-77-27				L505	1-412-529-11	INDUCTOR	22µH		
D1401	8-719-929-15	DIODE MTZJ-T-77-9.1B				L604	1-412-525-31	INDUCTOR	10µH		
						L605	1-412-519-11	INDUCTOR	3.3µH		
						L606	1-412-519-11	INDUCTOR	3.3µH		

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L607	1-412-525-31	INDUCTOR	10 $\mu$ H			R626	1-218-715-11	METAL CHIP	9.1K	0.50%	1/16W
L608	1-412-529-11	INDUCTOR	22 $\mu$ H			R627	1-215-481-00	METAL	330K	1%	1/4W
<b>PHOTO COUPLER</b>											
<b>⚠</b> PH602	8-749-924-35	PHOTO COUPLER	ON3171-R			R628	1-260-131-11 (KV-29FV300(S) ONLY)	CARBON	470K	5%	1/2W
<b>IC LINK</b>											
PS601	1-576-337-21	LINK, IC				R629	1-215-481-00	METAL	330K	1%	1/4W
PS1401	1-576-337-21	LINK, IC				<b>⚠</b> R630	1-215-481-00	METAL	330K	1%	1/4W
<b>TRANSISTOR</b>											
Q509	8-729-423-33	TRANSISTOR 2SC3311A-QRSTA				R631	1-218-720-11	METAL CHIP	15K	0.50%	1/16W
Q600	8-729-052-32	TRANSISTOR IRFB7N50A-LF31				R632	1-218-668-11	METAL CHIP	100	0.50%	1/16W
Q601	8-729-052-32	TRANSISTOR IRFB7N50A-LF31				<b>⚠</b> R640	1-249-417-11	CARBON	1K	5%	1/4W
Q605	8-729-140-96	TRANSISTOR 2SD774-T-34				R647	1-218-667-11	METAL CHIP	91	0.50%	1/16W
Q606	8-729-422-27	TRANSISTOR 2SD601A-QRS-TX				<b>⚠</b> R658	1-249-393-11	CARBON	10	5%	1/4W
Q608	8-729-922-37	TRANSISTOR 2SD2144S-TP-UVW				<b>⚠</b> R659	1-249-393-11	CARBON	10	5%	1/4W
Q690	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R660	1-216-833-11	RES-CHIP	10K	5%	1/10W
Q691	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				R667	1-216-833-11	RES-CHIP	10K	5%	1/10W
Q1401	8-729-424-02	TRANSISTOR 2SB709A-QRS-TX				<b>⚠</b> R668	1-249-413-11	CARBON	470	5%	1/4W
<b>RESISTOR</b>											
R534	1-216-833-11	RES-CHIP	10K	5%	1/10W	R670	1-216-833-11	RES-CHIP	10K	5%	1/10W
R535	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	R671	1-243-979-71	METAL OXIDE	0.1	5%	2W
<b>⚠</b> R603	1-219-513-11 (KV-27FV300/29FV300(N)/32FV300/36FV300 ONLY)	CARBON	4.7M	5%	1/2W	R672	1-243-979-71	METAL OXIDE	0.1	5%	2W
R604	1-216-833-11	RES-CHIP	10K	5%	1/10W	R687	1-205-998-11	CEMENTED	1	5%	10W
R606	1-216-833-11	RES-CHIP	10K	5%	1/10W	R688	1-205-998-11	CEMENTED	1	5%	10W
R607	1-216-833-11	RES-CHIP	10K	5%	1/10W	R691	1-216-837-11	RES-CHIP	22K	5%	1/10W
R608	1-216-833-11	RES-CHIP	10K	5%	1/10W	R692	1-216-837-11	RES-CHIP	22K	5%	1/10W
R609	1-205-998-11	CEMENTED	1	5%	10W	R694	1-216-837-11	RES-CHIP	22K	5%	1/10W
R610	1-216-833-11	RES-CHIP	10K	5%	1/10W	<b>⚠</b> R698	1-249-377-11	CARBON	0.47	5%	1/4W
R611	1-216-833-11	RES-CHIP	10K	5%	1/10W	<b>⚠</b> R699	1-218-265-11 (KV-29FV300(S) ONLY)	METAL	8.2M	5%	1W
R612	1-260-131-11 (KV-29FV300(S) ONLY)	CARBON	470K	5%	1/2W	R1401	1-216-837-11	RES-CHIP	22K	5%	1/10W
R613	1-216-833-11	RES-CHIP	10K	5%	1/10W	R1402	1-216-837-11	RES-CHIP	22K	5%	1/10W
R614	1-216-825-11	RES-CHIP	2.2K	5%	1/10W	R1403	1-216-833-11	RES-CHIP	10K	5%	1/10W
R615	1-202-933-61	FUSIBLE	0.1	10%	1/2W	R1404	1-216-840-11	RES-CHIP	39K	5%	1/10W
R616	1-216-822-11	RES-CHIP	1.2K	5%	1/10W	R1405	1-216-840-11	RES-CHIP	39K	5%	1/10W
R617	1-216-821-11	RES-CHIP	1K	5%	1/10W	R1406	1-216-840-11	RES-CHIP	39K	5%	1/10W
R618	1-216-864-11	SHORT				R1407	1-216-817-11	RES-CHIP	470	5%	1/10W
<b>⚠</b> R619	1-249-377-11	CARBON	0.47	5%	1/4W	R1408	1-216-817-11	RES-CHIP	470	5%	1/10W
R620	1-215-857-71	METAL OXIDE	10	5%	1W	R1409	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R625	1-216-817-11	RES-CHIP	470	5%	1/10W	R1410	1-216-829-11	RES-CHIP	4.7K	5%	1/10W
R617	1-216-821-11	RES-CHIP	1K	5%	1/10W	R1411	1-216-821-11	RES-CHIP	1K	5%	1/10W
R618	1-216-864-11	SHORT				R1412	1-218-684-11	METAL CHIP	470	0.50%	1/16W
<b>⚠</b> R619	1-249-377-11	CARBON	0.47	5%	1/4W	R1413	1-216-789-11	RES-CHIP	2.2	5%	1/10W
R620	1-215-857-71	METAL OXIDE	10	5%	1W	R1414	1-216-809-11	RES-CHIP	100	5%	1/10W
R625	1-216-817-11	RES-CHIP	470	5%	1/10W	R1415	1-216-837-11	RES-CHIP	22K	5%	1/10W
R617	1-216-821-11	RES-CHIP	1K	5%	1/10W	R1416	1-216-825-11	RES-CHIP	2.2K	5%	1/10W
R618	1-216-864-11	SHORT				R1457	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W
<b>⚠</b> R619	1-249-377-11	CARBON	0.47	5%	1/4W	R1458	1-218-708-11	METAL CHIP	4.7K	0.50%	1/16W



**NOTE:** The components identified by shading and mark are critical for safety. Replace only with part number specified.

**NOTE:** Les composants identifiés par un trame et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

REF. NO.	PART NO.	DESCRIPTION	VALUES	REF. NO.	PART NO.	DESCRIPTION	VALUES
R1461	1-218-716-11	METAL CHIP	10K 0.50% 1/16W	*	4-086-349-01	CARTON, HSC	
R1462	1-218-716-11	METAL CHIP	10K 0.50% 1/16W		4-087-224-01	CARTON, INDIVIDUAL	(KV-36FV300 ONLY)
R1481	1-216-833-11	RES-CHIP	10K 5% 1/10W				(KV-27FV300/29FV300 ONLY)
R1482	1-216-829-11	RES-CHIP	4.7K 5% 1/10W				
R1487	1-216-864-11	SHORT					
<b><u>RELAY</u></b>							
RY501	1-755-198-11	RELAY					
RY600	1-755-395-11	RELAY (AC POWER)					
<b><u>TRANSFORMER</u></b>							
T601	1-435-617-11	TRANSFORMER, LINE FILTER					
T603	1-437-783-11	TRANSFORMER, STAND BY					
		(KV-27FV300/29FV300(N)/32FV300/36FV300 ONLY)					
T603	1-437-784-11	TRANSFORMER, STAND BY					
		(KV-29FV300(S) ONLY)					
T604	1-437-607-11	POWER ISOLATION TRANSFORMER					
T605	1-437-785-11	TRANSFORMER ASSY POWER (HST)					
		(KV-36FV300 ONLY)					
<b><u>THERMISTOR</u></b>							
THP501	1-803-540-11	THERMISTOR, POSITIVE					
		(KV-29FV300(S) ONLY)					
THP501	1-803-629-11	THERMISTOR, POSITIVE					
		(KV-36FV300 ONLY)					
THP501	1-804-313-11	THERMISTOR, POSITIVE					
		(KV-27FV300/29FV300(N)/32FV300 ONLY)					
<b><u>VARISTOR</u></b>							
VDR600	1-803-585-11	VARISTOR ENE271D-10A					
		(KV-27FV300/29FV300(N)/32FV300/36FV300 ONLY)					
VDR600	1-803-967-11	VARISTOR ENE621D-14A					
		(KV-29FV300(S) ONLY)					
<b><u>ACCESSORIES AND PACKING</u></b>							
*	A-1400-607-A	HD BOARD, MOUNTED					
		(KV-32FV300/36FV300 ONLY)					
*	4-041-423-01	SHEET, PROTECTION					
		(KV-36FV300 ONLY)					
	4-085-910-01	CARTON, INDIVIDUAL					
		(KV-32FV300 ONLY)					
<b><u>REMOTE COMMANDER</u></b>							
	1-476-668-11	REMOTE COMMANDER (RM-Y182)					
		(KV-32FV300/36FV300 ONLY)					
	1-476-681-11	REMOTE COMMANDER (RM-Y181)					
		(KV-27FV300/29FV300)					
	4-978-977-11	BATTERY COVER (KV-RM-Y181/RM-Y182)					



\* A-1400-607-A HD BOARD, MOUNTED  
(KV-32FV300/36FV300 ONLY)

#### ACCESSORIES AND PACKING

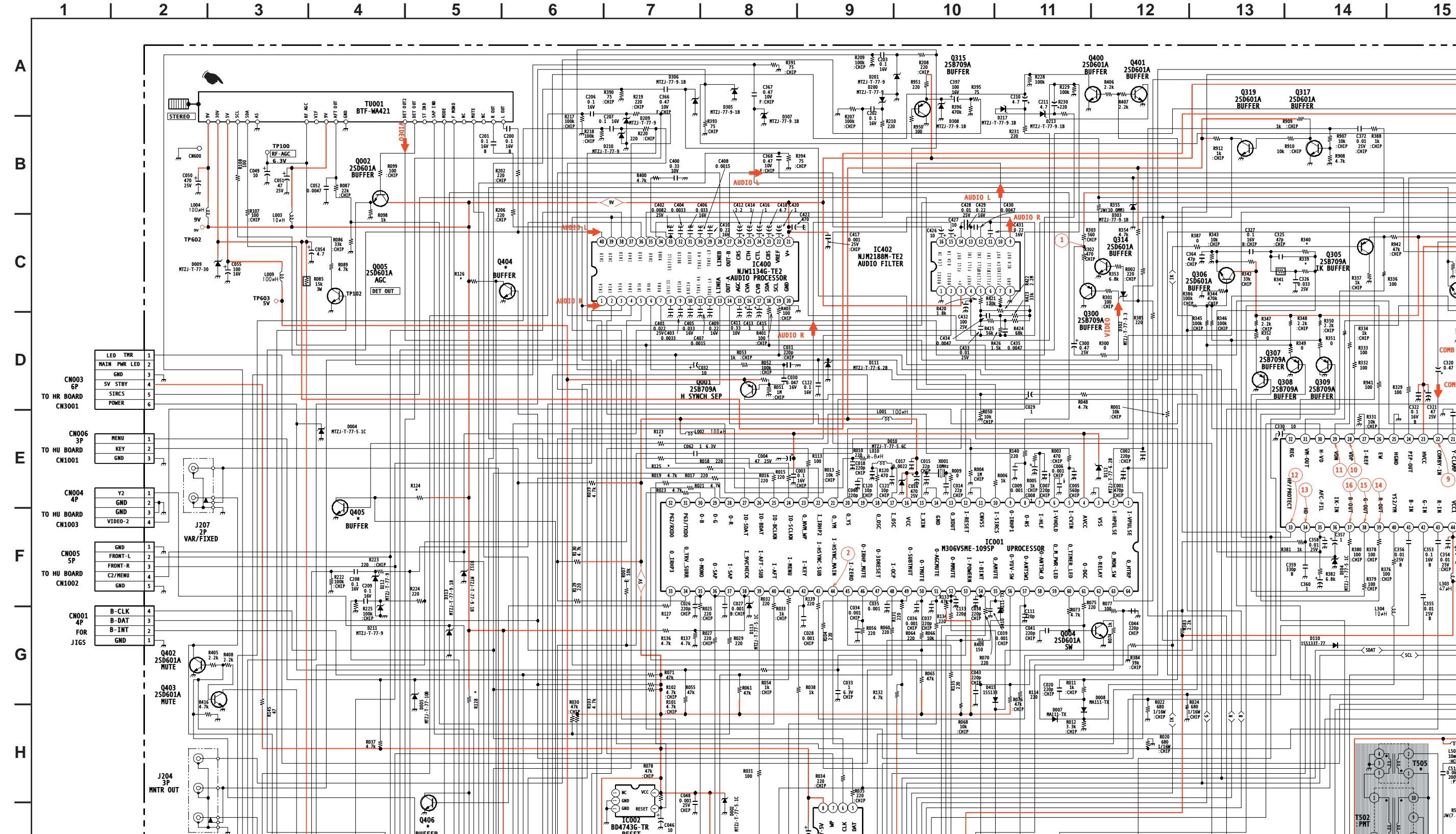
\* 4-041-423-01 SHEET, PROTECTION  
(KV-36FV300 ONLY)

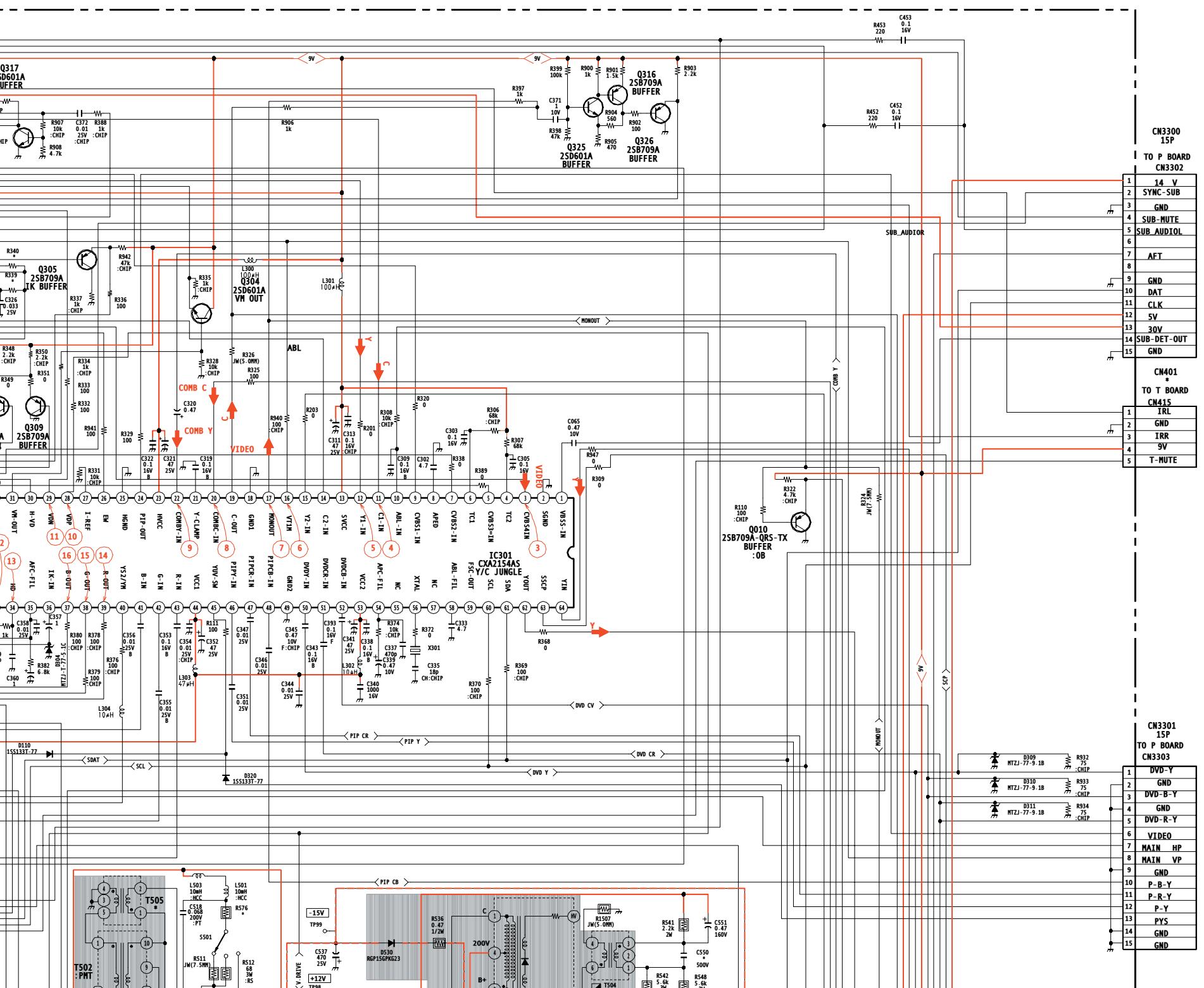
4-085-910-01 CARTON, INDIVIDUAL  
(KV-32FV300 ONLY)

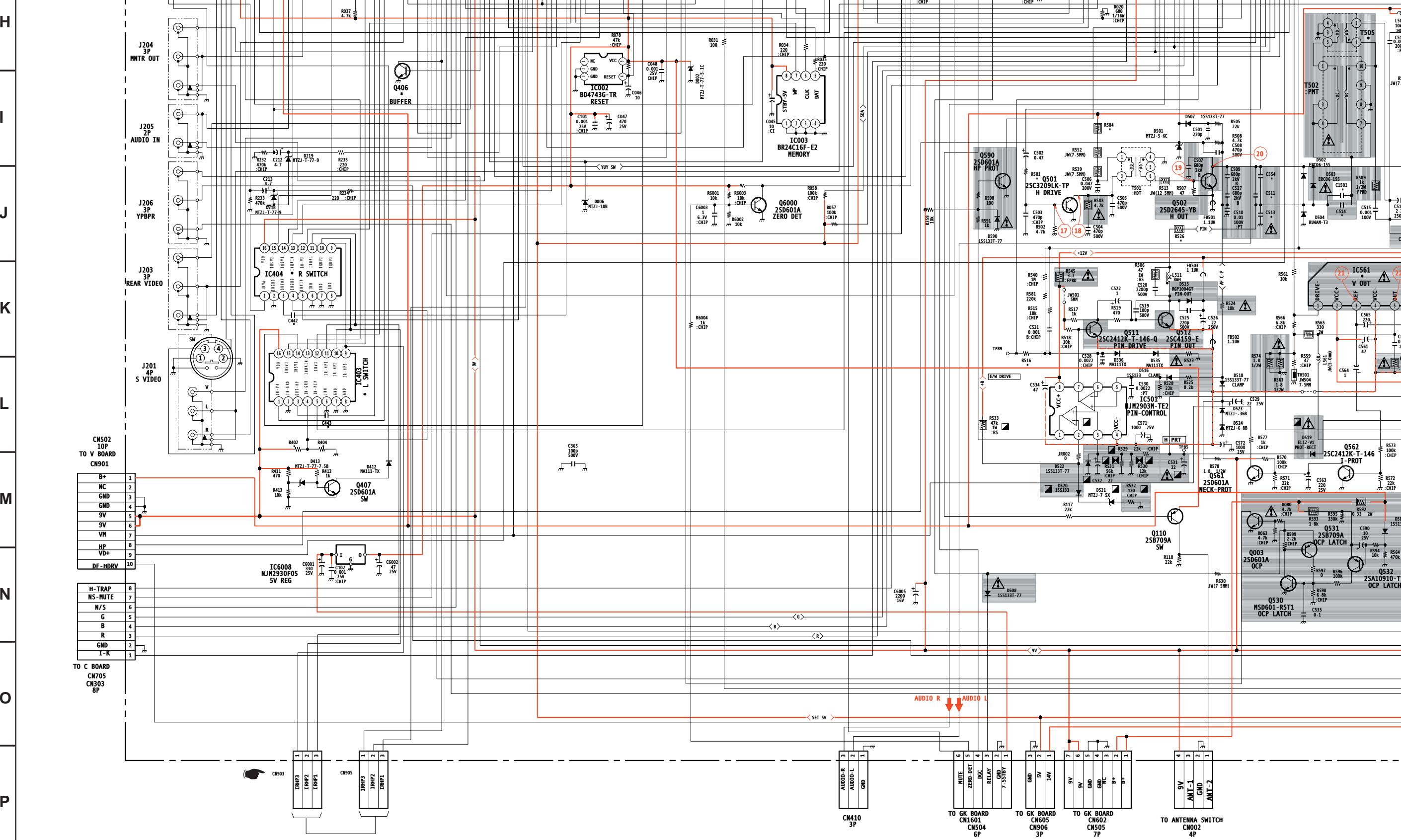
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**Sony Technology Center**  
**Technical Services**  
**Service Promotion Department**

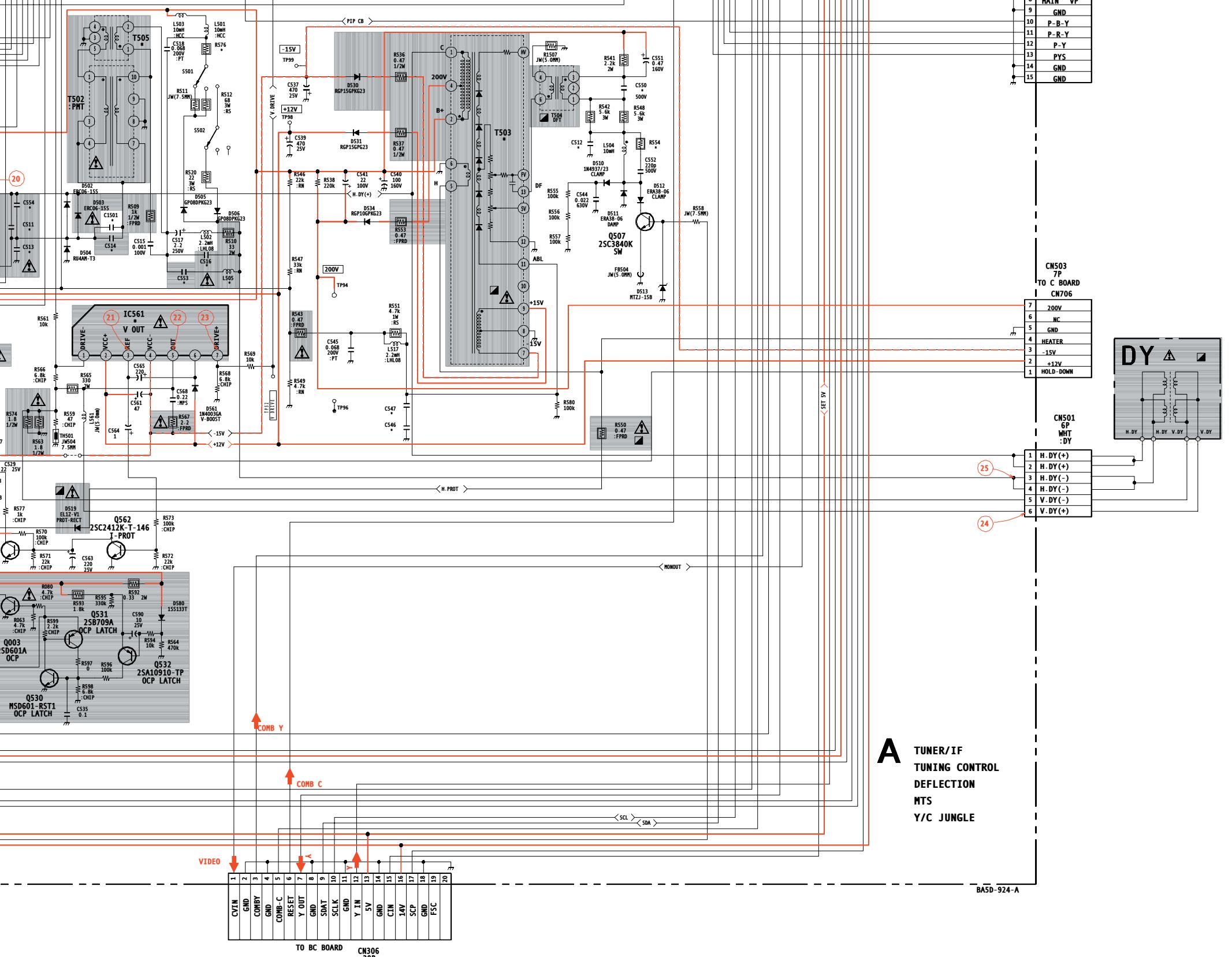
**English**  
**2002CJ74059-1**  
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# A BOARD SCHEMATIC DIAGRAM









**A** TUNER/IF  
TUNING CONTROL  
DEFLECTION  
MTS  
Y/C JUNGLE

## PRINTING THE SERVICE MANUAL

The PDF of this service manual is not designed to be printed from cover to cover. The pages vary in size, and must therefore be printed in sections based on page dimensions.

### NON-SCHEMATIC PAGES

Data that does NOT INCLUDE schematic diagrams are formatted to 8.5 x 11 inches and can be printed on standard letter-size and/or A4-sized paper.

### SCHEMATIC DIAGRAMS

The schematic diagram pages are provided in two ways, full size and tiled. The full-sized schematic diagrams are formatted on paper sizes between 8.5" x 11" and 18" x 30" depending upon each individual diagram size. Those diagrams that are LARGER than 11" x 17" in full-size mode have been tiled for your convenience and can be printed on standard 11" x 17" (tabloid-size) paper, and reassembled.

#### TO PRINT FULL SIZE SCHEMATIC DIAGRAMS

If you have access to a large paper plotter or printer capable of outputting the full-sized diagrams, output as follows:

- 1) Note the page size(s) of the schematics you want to output as indicated in the middle window at the bottom of the viewing screen.
- 2) Go to the File menu and select Print Set-up. Choose the printer name and driver for your large format printer. Confirm that the printer settings are set to output the indicated page size or larger.
- 3) Close the Print Set Up screen and return to the File menu. Select "Print..." Input the page number of the schematic(s) you want to print in the print range window. Choose OK.

#### TO PRINT TILED VERSION OF SCHEMATICS

Schematic pages that are larger than 11" x 17" full-size are provided in a 11" x 17" printable tiled format near the end of the document. These can be printed to tabloid-sized paper and assembled to full-size for easy viewing.

If you have access to a printer capable of outputting the tabloid size (11" x 17") paper, then output the tiled version of the diagram as follows:

- 1) Note the page number(s) of the schematics you want to output as indicated in the middle window at the bottom of the viewing screen.
- 2) Go to the File menu and select Print Set-up. Choose the printer name and driver for your printer. Confirm that the plotter settings are set to output 11" x 17", or tabloid size paper in landscape (  ) mode.
- 3) Close the Print Set Up screen and return to the File menu. Select "Print..." Input the page number of the schematic(s) you want to print in the print range window. Choose OK.

#### TO PRINT SPECIFIC SECTIONS OF A SCHEMATIC

To print just a particular section of a PDF, rather than a full page, access the Graphics Select tool in the Acrobat Reader tool bar.

- 1) To view the Graphics Select Tool, press and HOLD the mouse button over the Text Select Tool which looks like:  This tool will expand to reveal to additional tools.  
Choose the Graphics Select tool by placing the cursor over the button on the far right that looks like: 
- 2) After selecting the Graphics Select Tool, place your cursor in the document window and the cursor will change to a plus (+) symbol. Click and drag the cursor over the area you want to print. When you release the mouse button, a marquee (or dotted lined box) will be displayed outlining the area you selected.
- 3) With the marquee in place, go to the file menu and select the "Print..." option. When the print window appears, choose the option under the section called "Print Range" which says "Selected Graphic".  
  
Select OK and the output will print only the area that you outlined with the marquee. 

(continued >)

## ON-SCREEN SEARCH OPTION

All of the text within the service manual PDF is content searchable. This means that you can enter any text, word, phrase or reference number that appears in the manual, and the PDF software will search, find and move the cursor to the location where you requested text first appears. This feature can be particularly useful in locating components on a specific schematic or printed wire circuit board (PWB) diagrams.

Follow these steps to effectively locate a component on a schematic diagram:

- 1) Locate the schematic you want to search by clicking on the corresponding bookmark on the left side of the screen. The view on the right of the screen will then jump to the desired schematic page.
- 2) Magnify the diagram to at least 400% before conducting a component search. This will enable you to easily view the reference number when it is highlighted on screen. To do this, click on the magnifying glass button on the tool bar at the top of the screen. Move the cursor over the diagram and RIGHT click your mouse. Select the 400% magnification option on the pop-up menu. Click on the button with the icon of the open hand to deactivate the magnification tool
- 3) Search the diagram (or the entire manual) by clicking on the binocular button tool at the top of the screen. The "Find" window will appear and allow you to type in your desired text. Type in a reference designator, such as R502, and click on the "Find" button. If the component is not on the diagram, but is listed anywhere else in the manual, the cursor will jump to the first location the text is found in the file. To find another instance of that same text, click on the binocular button again and select "Find Again."